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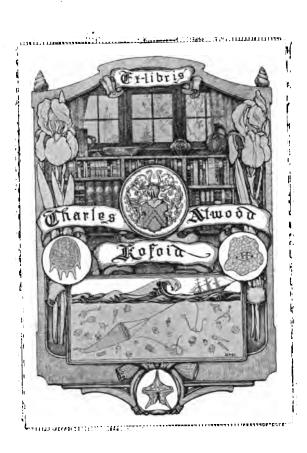
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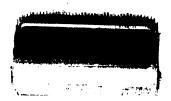
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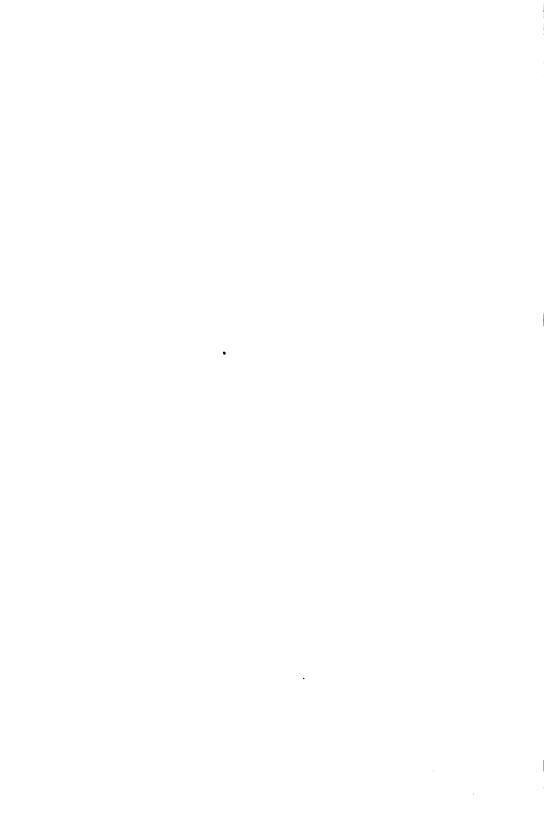






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Jos. W. Smith

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GLEANINGS FROM THE SEA:

SHOWING THE

PLEASURES, PAINS AND PENALTIES

OF

LIFE AFLOAT,

WITH CONTINGENCIES ASHORE.

BY JOSEPH W. SMITH.

"The Sea is His, and He Made It."

Andover, Mass.

PUBLISHED BY THE AUTHOR.

1887.

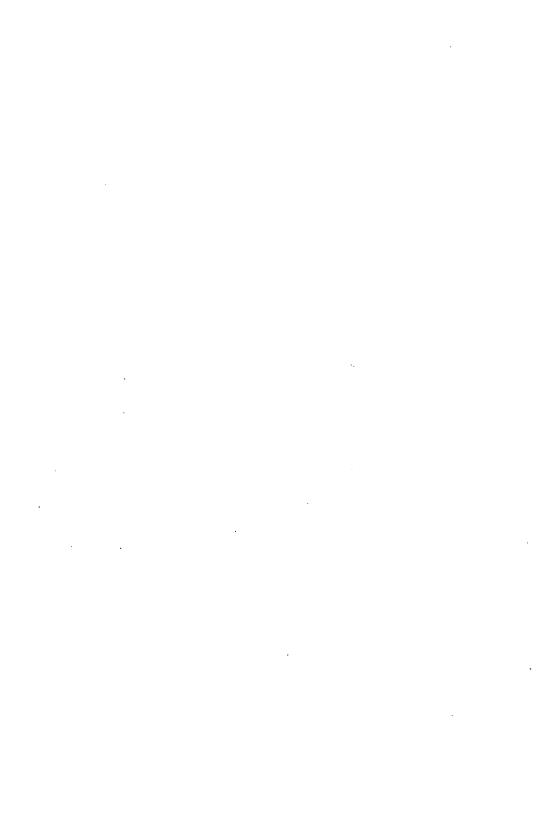
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TO B. P. SHILLABER,

THE GENIUS OF WHOSE PEN, AND THE GLOW OF A KINDLY NATURE, HAVE
GLADDENED SO MANY, AND MADE HOME DUTIES LIGHTER AND MORE
CHEERFUL; WHILE HE, HIMSELF NOW RIPE IN YEARS—A MARTYR
TO PAIN—HAS BEEN FORCED INTO SECLUSION FROM THE OUTSIDE WORLD, YET PATIENT AND UNCOMPLAINING UNDER
THE MINISTRATION OF SORROW AND BEREAVEMENT;
A PUBLIC BENEFACTOR, WHOSE LIFE WORK HAS
BEEN MADE THE MORE RADIANT AND BEAUTIFUL BECAUSE OF EARTHLY ATTRITION;
AND UNDER ALL, AND ABOVE ALL,
WHO HAS WON FOR HIMSELF
THAT RARE DISTINCTION, THE
"CHEERFUL INVALID,"
THIS BOOK IS AFFECTIONATELY DEDICATED,
BY HIS ADMIRING FRIEND,

JOSEPH W. SMITH.



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PREFACE.

ONE of the principal objects in issuing the present book, "Gleanings from THE SEA," is to extend what has already been printed, in "WINTER TALK ON SUMMER PASTIME," as that volume, being limited to a very small edition, only reached a few of my personal friends. Another reason is, that the book recites many incidents in which friends took part, and in which many others, who might have done so but for business engagements, may be interested. Through this medium I can speak, face to face, with them all, and for them it is writ-Should the public be so interested in the volume as to lead them to pur chase it, they are assured that the proceeds of its sale will go towards providing reading matter for the Life Saving Stations upon our coast. In issuing a work upon so broad a subject as "GLEANINGS FROM THE SEA," one must necessarily depend largely upon others for material, and in the present edition I am indebted to many, who have, from experience and acquired information, enabled me, by their contributions, to add a greater interest to the various matters treated of in the previous edition. Not the least among the number is my particular friend, B. P. Shillaber (Mrs. Partington), who has freshened up these pages with verse and prose, and who, in a pleasant note to me, when enjoying my summer vacation at Biddeford Pool, July, 1884, added these words: "I envy you your vacation, during which you avoid the madding crowd, and, out upon the breast of old ocean, can exchange politics for pollock, confusion for cod, and hurry for halibut; and I am sure that companionship with the trim built 'Jennie B,' will afford you the greatest satisfaction. You are, indeed, a happy man, and will enjoy the grave sea philosophy of Capt. Goldthwait far more than the theological discussions of Andover." In conclusion, to my friends first, but to all who may read these pages, I trust that my fishing "lines" will have "fallen in pleasant places."

JOSEPH W. SMITH.

Andover, Mass., 1885.



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INTRODUCTION.

THERE is not a school boy, who trudges along the country road on his way to school, with his geography under his arm, but can tell something of the make-up of this grand country He knows about its discovery by Columbus, the landing of the Pilgrims, the Revolutionary war, the war of 1812, and also of the recent Rebellion; and he will open his map and point out to you the beautiful rivers, lakes and fertile valleys. The scholar more advanced, can tell you the products of every state; knows where the railroads cross and intersect each other; is somewhat acquainted with our agricultural and manufacturing interests, and in fact you find him pretty well posted on all that relates to our country. The riper scholar can tell you of other countries-England, France and Spain; Italy with its sunny clime; Switzerland and the Alps; Greece, once the seat of learning; China and Confucius; Egypt and the Holy Land; and you find that there is no part of the habitable globe that he does not know something about. if you ask those, who live away from the ocean, about the inhabitants of the mighty deep; the different kinds of fish and animals that find their home in the sea, and their worth; or in relation to the men who pursue the business, and their various modes of catching fish for a living; the storms they encounter; the wind, snow and fog they have to contend with, I think the majority would be found to know very little about it.

Do you ever think, when you sit down to a nice piece of halibut or codfish for breakfast, of the hardships the fishermen undergo to give you that dainty bit? I propose to tell you some experiences of my own in this matter, and also facts that I have gathered from the fishermen themselves, which I hope will interest and instruct you.

There are two phases of deep-sea fishing, one called shore, the other bank. It is of the former that I shall speak, from experience, and of the latter, state some facts obtained from other sources. Shore fishing (so called by the fishermen) is where the fishermen go from three to thirty miles from land, and where their trips hardly ever exceed a fortnight, and are oftener less.

Saco Bay is about one hundred miles from Boston, and is formed by Cape Elizabeth on the north and Fletcher's Neck on the south. Its width is about ten miles. The bay extends into the land about four miles, and its shores are nearly semi-circu-The towns of Biddeford, Saco and Scarborough, are upon its shores. The central portion of the bay is called "Old Orchard." There are several islands in the bay—the two off Prout's Neck called Stratton and Bluff islands. The other islands are nearer Fletcher's Neck; the largest, Wood Island, upon which there is a revolving light. This island forms a natural breakwater for the harbor. Negro Island is two hundred and fifty yards west, and connected with it at low water. Island is eight hundred yards west of Negro Island. On the north-east end is a monument of gray stone, forty feet high and surmounted by a circular cap. At low tide this island is connected with the main land of Biddeford by a pebbly bar. quarter of a mile west of Stage Island is Basket Island, also connected with the main land by a pebbly bar at low water. Two-thirds of a mile from the middle of Stage Island is Ram It is oval in shape and entirely destitute of trees, Three-quarters of a mile north is Eagle Island, also destitute of This island is about one mile from Ferry Beach. tween Wood Island and the shore we find a small island called



TRISTAM GOLDTHWAITE'S HOUSE, BIDDEFORD POOL, MAINE.

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Gooseberry, and on the back of the neck another small pebbly spot of ground called Beach Island. A rock which is nearly covered at high water, and upon which the surf breaks at all times, is called Washburn.

At the mouth of the Saco River, projecting from the northern shore, is a granite pier or breakwater extending in a south-easterly direction for eleven hundred yards. The entrance to the river is between Stage Island monument and the breakwater. The sweep of Old Orchard Beach, together with the tides and changeable winds, cause the movable sands to obstruct navigation at the mouth of the Saco River. The breakwater was built by an appropriation of Congress, to prevent the channel of the river near the bar from filling up with sand, and changing. The cities proper, Saco and Biddeford, lie up the river about six miles, opposite each other.

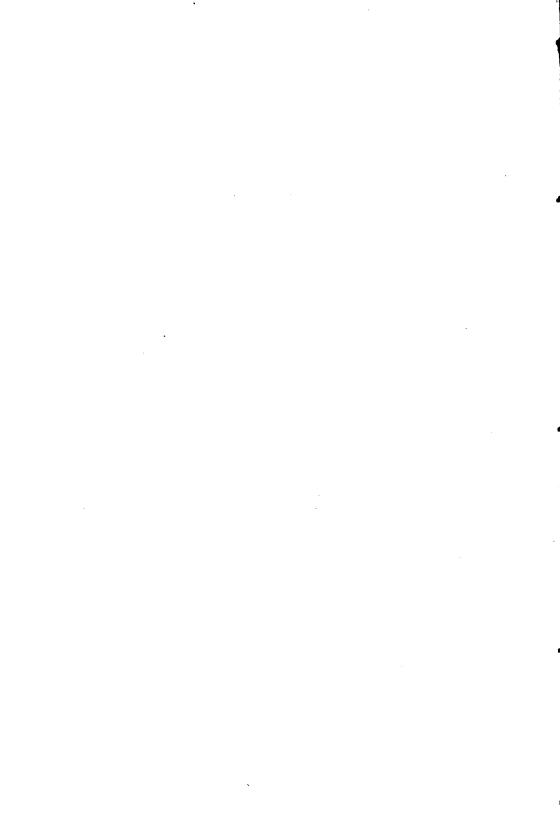
"Biddeford Pool"—included in the topography of ward one, Biddeford, and giving its name to the entire vicinity—is a broad interior basin, about one-fourth of a mile from the sea, with which it is connected by a narrow channel. It covers about four hundred acres, and is filled and emptied at every tide. The water rushes with great force through the channel at ebb and flow, and it is almost impossible for a boat to cross it except at slack tide or still water. It is a picturesque sheet of water when filled, and excellent for boating. This Pool has no part, beyond its name, in the incidents presented in this volume.

Of the early history of Fletcher's Neck I have space to say but little. A word or two may, however, suffice. It was settled in 1734. There are three houses in good condition that date back to that time: the "Hussey House," the house occupied by Tristam Goldthwait, Sen., and the "Haley House." When I first knew the place there were fourteen houses. Two male heads of families now only remain. Shipbuilding was formerly carried on at this place and quite a business was done before the war of 1812. At this place is located Life-Saving Station, No. 6, of which I shall hereafter speak. Fletcher's Neck is accessible by land between the inner and the

outer beaches, a distance of about one mile, by a hard gravel road built a few years ago. By water a steamer plies up and down Saco River and connects with some of the trains of the Old Orchard Beach railway. The Little Beach railway carries an average of fifteen thousand passengers each season.

Among the notable points of interest in the vicinity of Biddeford, is an old church, about half way between Biddeford and the Pool, above which hover the limbs of a large pine tree, as if in loving benediction. The limbs extend out over the roof, contrary to the rules of trees of this description, wave solemnly over the edifice, and sigh as if pining for past importance. is now but transiently used, a preacher coming from Biddeford only occasionally to occupy its pulpit, during the summer, and then it is but sparsely filled by visitors. It is not, by any means, like "Alloway's auld haunted kirk," open to the winds of heaven, and made the abode of warlocks and witches, but a grave pile, resting in melancholy reflection by the way, as if it had a great secret to tell but could not give it utterance. Passers by regard it with reverent attention and wonder how it got there. I was curious to learn something about it myself, and wrote to a clerical friend for information regarding it, and kindred matters, to which he responded: "I suppose you know that the church organization to which this structure belonged was the first in Biddeford, though the first edifice was not on this spot. Where the first stood I am not quite sure. Rev. Seth Hetches was settled in Biddeford, and was the first Puritan minister. He continued his service till 1675. was a church edifice near the old burying-ground, just above Eliot Jordan's house, and that was why the burying-ground was located there, it being a custom to bury the dead under the shadow of the church, or as near the sanctuary as possible: Whether the first Puritan church stood here, or not, I am unable to determine. The Church of England service was the first introduced into Biddeford and Saco. Robert Jordan, who came to Cape Elizabeth in 1640, and from whom descended the vast family of Jordans in this country, was the first to in-

THE OLD CHURCH BY THE WAYSIDE, SOUTH BIDDEFORD, MAINE.



troduce the Episcopal service, and there was a church edifice, I suppose, somewhere on the Neck. In the Records in the clerk's office, Biddeford, there is a record of the action of the colony in regard to the seating of women in this church, certain persons of distinction being assigned to the most important positions. The services in this church were, for a time, conducted by a layman, named Robert Booth. A vote authorizing him to act in that capacity is recorded in the old town The originals, well preserved, are curious and difficult to read, but Col. Edgerly, who was City Clerk some twenty years ago, made excellent copies of them which can be read with ease." But little satisfaction is derived from this, regarding the old "Pine Church," and I opine that little can be found, yet the church records may exist which would throw some light upon it, but simple allusion to it now is my object, speaking of it as an interesting relic of the devotional spirit of the past.

The harbor proper of Biddeford Pool, is embraced within the arm of Fletcher's Neck, which affords facilities for a fishing commerce that is growing to be of much importance. Quite a fleet of vessels is now employed in the fisheries, and a fine new schooner—the Joseph Warren—has just been added to the number, a very beautiful specimen of marine construction, that will, doubtless, stimulate the production of others for the same purpose. At times the harbor presents a lively appearance, with its show of incoming and outgoing vessels, and, as may be judged by the pictures contained in this volume, the people take a deep interest in their home commerce. Pool, however, is not a great market for fish. They are, when caught, taken to Portland, for the most part, where there is a ready demand for them. Those engaged in fishing are a sturdy and energetic people, very industrious while the season lasts, and usually secure enough gain in the summer to last them comfortably through the winter. A happy association with them for years, warrants the good word I speak for them.



GLEANINGS FROM THE SEA.

TRIAL TRIP OF THE JENNIE B.

THE Jennie B. lay at Scituate, awaiting the voyage across the Bay and along the coast to Biddeford Pool, and, on a bright morning in June, Capt. W. F. Goldthwait and myself proceeded to join her and sail her to her destination. A boat and stores for her we had provided in Boston and placed on board the schooner Nausett, intending to intercept her in the Bay and transfer them to our own schooner. After the usual preliminaries of adjusting papers at the Scituate custom house, a transaction which, after previous purchase, made the good schooner Jennie B. legally mine, we started from the wharf, under charge of Capt. Bates, her former owner, in search of the Nausett, bound It was nearly noon when we started, with a cheerful send-off from those on the wharf who had gathered to see us leave. The day was pleasant, although the wind was a little The scene was a charming one, and the Jennie B. showed her good sailing qualities as she cleared the harbor and beat out to sea, passing by Minot's Ledge and up Boston Bay to meet the expected vessel. We met the Nausett at quarter past three, and, the boat and supplies put on board, Capt. Bates left us and returned to Scituate in the Nausett.

Capt. Frank now took the tiller, and shaped the Jennie B.'s course for Cape Ann, with a fair wind. Feeling proud of my

new purchase I watched her behavior with deep interest. She made a good promise of speed, was steady as a church, and I felt satisfied, as she was to stand in the relation of a home to me and my friends during the summer. The southerly wind allowed us to keep a direct course, and we enjoyed every moment. We passed Marblehead—its pleasant summer houses gleaming in the warm light of the afternoon sun—the islands in Salem harbor, Manchester-by-the-Sea, Gloucester, East Point Light and Rockport South Side, then, rounding Thatcher's Island, we dropped anchor in Rockport harbor at 8 o'clock P. M., and turned in for the night.

At 4 o'clock the next morning all hands were piped upon deck, and, with a fine breeze, the Jennie B. swept out of Rockport harbor. As she was bowling along I hailed a fisherman with the query:

"Are there any sunken rocks in the harbor?"

"Yas," was the reply, "there's one clus to ye, and, if you don't keep a sharp look out, yer'll be onto it. Th'raint more'n tew foot o'water on't."

This was a comforting assurance, and it seemed somewhat churlish in him not to have informed us of our danger without my asking. But Capt. Frank was equal to the emergency, and, almost before the fellow had done speaking, he said:

"I know the rock he speaks of, and we are pretty near it, but there's more water on it than he says."

Running his oar down: "There," said he, "We will go over it without danger of touching."

We did so, the Jennie B., with her ten and six one-hundredths tonnage and great draught, entirely ignoring its existence. To another fisherman I said:

"It seems to me that you have some lively old mosquitoes here. 'Twas lucky for us that we anchored late last night; the suckers didn't find us till morning."

He smiled and said, quaintly:

"Wal, I guess, stranger, they'll stick to ye long enough to make up for lost time."



THE "JENNIE B." RUNNING IN BY THE LANDING, BIDDEFORD POOL, MAINE.



This was at the time when the early fishermen were starting on their daily trips, in sailboats and dories, and quite a fleet After getting out of the harbor we of them were bound out. shaped our course for the Isles of Shoals. The towns along the shore we were leaving-Rockport, Essex, Ipswich, Newburyport—were all full of interest to me from early associa-One of the most thrilling incidents of my early life had Newburyport for its pivotal point. The evening before one Fourth of July three young men (myself and two others) procured a whaleboat at Newburyport for an excursion to the Shoals, and two days were spent there and along the New Hampshire coast. Returning, on the third day, we were beset by calm and fog, and reached the mouth of the river-and an ugly mouth it has at low tide, with the combers rushing in over the bar,—just at night, exhausted with rowing and in peril from the breakers that foamed around us. We barely escaped being swamped, and managed to anchor near one of the immense sand spits off Salisbury Beach. The weight of the anchor was not deemed sufficient, and, taking some short pieces of railroad iron from the bottom of the boat, we placed them in an iron chowder pot, securing them by a piece of wood across the top, lashed to the pot legs below. This was a capital anchor, we thought, and it answered its purpose. It rained fearfully, and thundered and lightened through the night, and as but two could sleep in the small cuddy at a time, the third must watch, and thus we alternately waited and soaked. I, for my part, have never felt any particular desire for the same experience again. Plum Island lights were near, but not visible for the fog. When we arrived next morning, we were informed that four men had been drowned on the bar a short time before we had anchored.

The sky had become cloudy after leaving Rockport, and the freshening breeze denoted what the sailors call "dirty weather." It soon began to rain and I went below to keep out of the wet, but standing ready for a sudden call. The wind now blew quite a gale, and I sprang for the tiller in a jiffy. Frank

held her up to it like a major, and there was nothing to do but let the boat "drive," and show what she was capable of performing as a "sailer of the salt, salt seas." She stood the squall nobly and came out all safe from the sudden attack, which was very brief. We were obliged, as the wind was hauling round to the northward, to go outside the Shoals, with only a moderate breeze to assist us. The sun came out about 9 A. M., which toned down the chill that followed the north wind, and had rendered a great coat very desirable.

We had passed Hampton Beach, Boar's Head, Little Boar's Head, and Rye Beach, all of which had peculiar interest to me, scenes of early visitation still gleaming amid the memories of youth. Fitting situation for such thoughts, becalmed two miles outside the Shoals, waiting, like Micawber, for something, in the way of a wind, to turn up. Oh for a little southerly breeze now, to set us towards the Pool! As we lay in sight of the three islands—Star, Appledore and Smutty Nose—Frank said, as a slight breeze fanned up from the north:

"Like St. Paul, when he came in sight of the three taverns, we will thank God and take courage."

Frank is a philosopher, and, to make the calm less burdensome, he told me stories of his early sea life that were very entertaining. He has many wise conceits and practical suggestions, but his modesty dooms him to a position like the flower that is born to blush unseen. But during the calm he described to me a plan—original or not I cannot say—for saving fishermen from inconvenience who come down to the Pool for bait: that is, by hoisting flags on board the schooners to let those from Gloucester and other places know just where to go to procure the needed supply without going into port. The plan is ingenious and practicable.

We were, at 11:30 A. M., past the Shoals with a gentle wind urging us on towards Boone Island, some ten miles distant. We laid her course with a S. E. breeze, and then took things easy, lying back—Frank and I—talking about the Pool and the happy hours of the past crowded so full with enjoyment.

We were soon off York Ledge, a very dangerous spot, with York Harbor in the back ground, fast becoming a popular watering place, with cottages dotted along the several beaches beyond, formed into communities from towns as remote as Concord, Manchester, Great Falls and nearer localities, with Cape Neddock the terminal point. Fleets of mackerel fishers were around us and in sight, prospecting for their fares, and the Jennie B. moved gallantly on to her destination at the rate of six knots an hour, with Boone Island light on her weather beam, and the sea glorious beneath the sparkle of the summer sun, warranting the apostrophe:

Oh Jennie B.! fair Jennie B.!

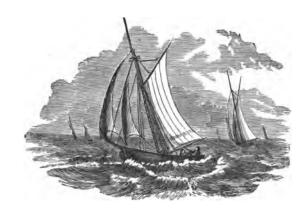
The waves that round thee leap
Seem full of fondest love for thee,
Queen Beauty of the deep.
With playful dalliance they fling
Their snow wreaths round thy way,
And, bowing like a sentient thing,
Thou seem'st as glad as they.

As an episode we spoke a fisherman off Boone Island light who indulged in an emphatic and characteristic grumble because there were so many dogfish round, that nothing else could be caught. These fish are the mosquitoes of the deep—always ready to bite. At 3:15 P. M., we were opposite Wells Beach, making better time with wind S. S. E. and considerable of it, with Cape Porpoise in prospect for the night, where we anchored at 7 P. M., thirteen hours from Rockport, having had all sorts of wind and weather—storm and calm—to attend us. We voted the Jennie B. a success. The threatening clouds had no fear for us.

"And calm and peaceful was our sleep, Rocked in the cradle of the deep."

Early the next morning we completed our trip and arrived at the Pool at 8 A. M. Thus terminated a delightful voyage, in which the Jennie B. sustained her reputation as a seaboat, her proprietor confirmed his satisfaction with her acquisition, the captain realized the delight of a true sailor in command of a trim-built vessel, and the crew—all two of them—more than satisfied with everything.

Said Tom Tarpaulin to his chum,
Bob Reefpoint at the rail,
"This 'ere 's a craft, now, as is some,
In which I 'd allers sail."
"Me, too," said Bob, "a craft as fine
As ever sailed the sea;
For gracefulness in every line,
Give me the Jennie B."



BIDDEFORD POOL AS A WATERING PLACE.

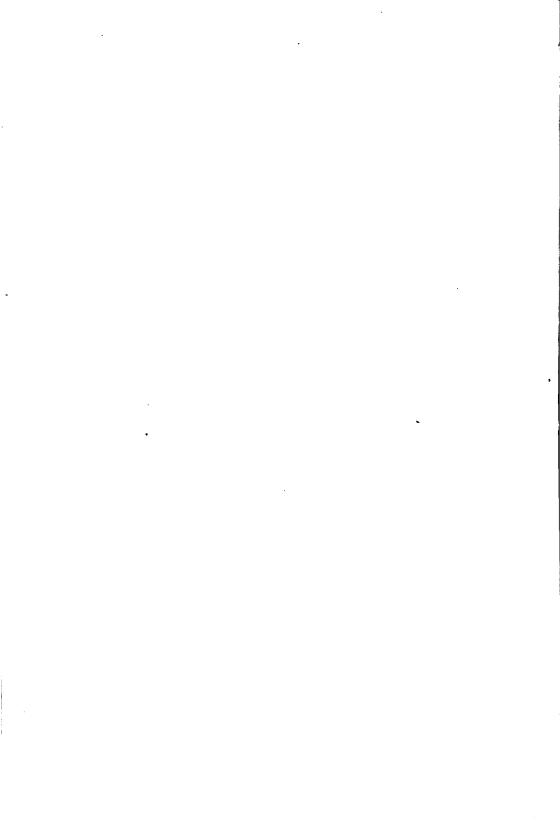
THERE is no resort on the whole Atlantic coast that Biddeford Pool is second to as a summer watering place. I speak from my own experience, and my readers will pardon me if my enthusiasm runs strong in this direction. Having visited various sea-shore resorts from Maine to Florida, I find that there is something lacking in them that gives to life the pleasures and joys that I find at the Pool. Although the hotels do not compare with those at Cape May, Long Branch, Newport and Nantasket, in splendor and fine appointments, yet they are all kept on a good principle, and one is very sure to get what he pays for. Those who seek a quiet retreat, away from the turmoil and bustle of the city, cannot fail to find at the Pool that quiet and rest they need; and those who are fond of deep-sea fishing, boating and bathing, are sure to find a place that has no superior in this direction. Nice boats and intelligent skippers, who are very accommodating, make a fishing trip a real pleasure. If the wish is for sailing, a splendid sail among the islands may be enjoyed. The pure sea air and elegant scenery serve to make the heart glad and happy. Those who wish for only as much of the sea as can be had in row-boats, will * have no trouble to get this in perfection at the Pool. A chance is offered for a row down the harbor among the shipping, and around the islands. Those who desire still water can also find inland waters just suited to their tastes. Another great feature is bathing. A fine beach, where one can enjoy the sport

of sea-bathing, near the hotels, with the breakers rolling in, is a nice place to partake of a salt-water rough and tumble bath. Those who prefer still water will find plenty of opportunities for this. Fishing from the rocks always delights the children, and the older ones do not fail to improve the opportunity when offered; while there is no place that has better advantages for deep-sea fishing. Are you a lover of nature? Then you will find much to amuse and instruct. The beautiful shore, coves and high bluffs, all washed by the waters of the Atlantic, are a school for the student of nature.

My recollection of the Pool dates back previous to 1840. well remember, though but a small boy then, how my mother used to get her three children ready for the summer vacation, and the pleasure of our yearly visit to the Pool has never been effaced from my memory. I look forward to it at the present time with the same interest. At the time I first went to the Pool, the Portland, Saco and Portsmouth railroad was not built, and my father took his family from Dover, by the old stage route, to Biddeford. I can just remember the old-fashioned stage, the jolly driver, and how we children enjoyed the ride. Dr. Horace Bacon, of Biddeford, with whom we became acquainted, entertained us several times at his house. tlefield, of Saco, who owned a line of stages, took us to the Pool, and continued to do so for many years. A singular coincidence, and one worth mentioning, is the fact that, after a lapse of thirty-eight years, this same Wm. Littlefield carried my family to the Pool, from Saco, consisting of the same number of children as my father's family-two boys and a girl-and of nearly the same ages, and continued to carry us until he gave up his stable business. It gives me great pleasure to renew my acquaintance with Mr. Littlefield, from year to year, and I have often enjoyed a ride with him to the Pool since he gave up This I have mentioned incidentally as a bit of history, and also as a mark of respect to an old friend who has the confidence of all who have the pleasure of his acquaintance. We wish him health and strength in his declining years.



THE MANSION HOUSE, (CHRISTOPHER HUSSEY PLACE,) BIDDEFORD POOL, MAINE.



The first house to entertain visitors at the Pool was the Mansion House, kept by Christopher Hussey, Sr., and wife. Mrs. Hussey acted as landlady, and her pleasant, motherly, Quaker style will long be remembered by those who enjoyed her hospitality. The families of Peter Lawson and Alexander Wright were the first regular summer boarders. They went to the Pool about 1833, and became guests of the Mansion House during the hot weeks of summer, and continued their annual visits for nearly fifty years. One little incident is worth mentioning to show the difference between then and now as The first year that Mr. Lawson stopped regards hotel bills. at the Mansion House, when he got ready to leave, he asked the landlady for his bill. She duly presented it, and after Mr. L. had looked it over, he asked her if she had not made a mistake, as he saw, by the figures, that he had only been charged one dollar and twenty-five cents a week. The landlady replied in her quaint Quaker manner, "If thee thinkest it is too much thee may take off some." In 1837 Christopher Hussey, Ir., succeeded his mother, and became at once a popular land-It was at this house my father stopped on his first visit to the Pool, and for many years the family found at Mr. Hussey's a restful summer home. My memory takes me back to the year 1838, and I can remember the jolly time we had with "Uncle Chris'," as he was called. Who, of all that company now living, that used to gather from year to year under his roof, does not remember the pleasant and social times enjoyed under the old "Balm-o'-Gilead tree," or strolling on the shores, gathering shells and mosses, or taking an evening row to Wood Island in the little boat "Jabe?" On pleasant days in summer a great many transient visitors came from Saco and Biddeford to spend the day and get a nice fish dinner, gotten up in Mrs. Hussey's best style. And those happy hours of my childhood will never be blotted from memory as long as reason holds her sway. Mr. Hussey continued the business with much success until his death, in 1876. Since that time his widow* and daugh-

^{*}Recently deceased.

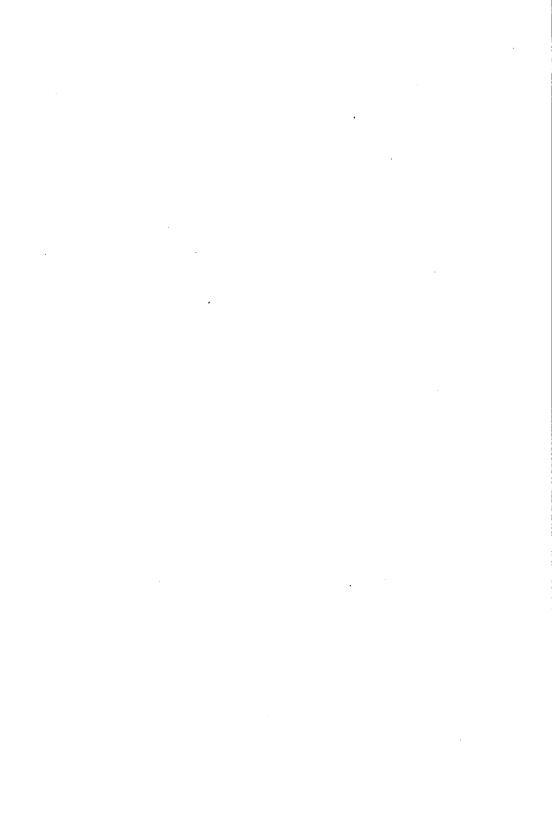
ters have carried on the business, and the kind treatment their guests receive at their hands always insures them a full house.

Mr. Daniel Holman was the next to entertain visitors. began in a small way in a one-story cottage. Business increasing from year to year, he made addition after addition, until he could accommodate one hundred and twenty-five persons. old Highland House was well known for its pleasant location, comfortable quarters and genial landlord. This place was patronized annually by families from many states of the Union, who always found, at Mr. and Mrs. Holman's, kind and hos-Among the visitors who yearly found a pitable treatment. cordial welcome were Senator Cragin, Hon. John P. Hale, Oliver Wendell Holmes, Hon. Anson Burlingame, Hon. N. P. Banks, Dr. Nathan Lord and Dr. Truman M. Post. Mr. Holman was a very energetic and persevering man. At the age of eighty he took the contract to carry the daily mail for four years from Biddeford to Biddeford Pool, a distance of eight miles. continued in the hotel business until his death, in July, 1878; his wife survived him but a few days. Mr. Holman was succeeded by his grandson, Walter S. Starkweather, who opened the house in 1879, and met with great success in catering to the wants of his guests. In the fall of 1870 Mr. Starkweather had the old Highland House removed from the spot on which it had stood for so many years, and in its place he erected one of the best hotels there was on the eastern coast. Highland House, as it was called, was truly a model house. Its appointments were all first-class, and it was fitted with all Three hundred people could be the modern improvements. accommodated at this hotel. Mr. Starkweather continued in the business two years, and was well patronized. In April, 1882, the house caught fire and was burned to the ground, with all its contents. The lot on which it stood is one of the best at the Pool, and we hope to see another hotel built on the same spot.

In 1844 Mr. Moses Hill leased the Cutts House for five years, and kept it as a summer boarding house. This house was pat-



STEAMER "S. E. SPRING" COMING TO HER WHARF, BIDDEFORD POOL, MAINE.



ronized by people from Lowell for a number of years. Hill was a popular landlord, and during the summer months his house was well filled with guests. In 1849 Mr. Isaac Bickford bought the Cutts property at the Pool, made additions to the house, and kept it as a hotel under the name of the Pool Mr. Bickford was very successful, and many are now House. living who look back with pleasure to the happy days they passed while under the care of the genial and courteous host of the Pool House, who is still living at the advanced age of eightynine.* Mr. Bickford gave up the business in 1862, sold the house to James Bryant, who carried on the hotel for a number of years, and then sold to the present proprietor, Mr. Frederick Yates, who changed its name from Pool to Yates House. Yates was a young man when he commenced hotel business, but his energy and perseverance won for him that success which comes to others through luck. His first step was to remodel the house, by making greater additions for the accommodation of summer travel, and to improve the surroundings in such a manner as should well please those who sought his house for a retreat during the hot weather. Mr. Yates has been very prosperous, and at the present time he not only runs his house at the Pool, but is also landlord of the Biddeford House, situated in the city proper. In the season of 1881, Mr. Yates, in connection with his other business, took the Sea-View Hotel at the Pool, but other matters were so pressing that he retired from it at the end of the season.+

In 1847 Mr. John C. Hussey rebuilt his house and opened it to accommodate the sea-shore travel. The Ocean House was well patronized from year to year, those who came under its roof found a hearty welcome, and nothing was left undone that could promote the welfare of its guests. Mr. Hussey carried on the business for a great many years, and then retired in favor of his son Charles. After it came under the management of the latter it was a popular resort for the Canadian

^{*}Since the above was written Mr. Bickford has passed away, at the ripe age of 89 years, 6 months.

[†] Yates House destroyed by fire June 1834.

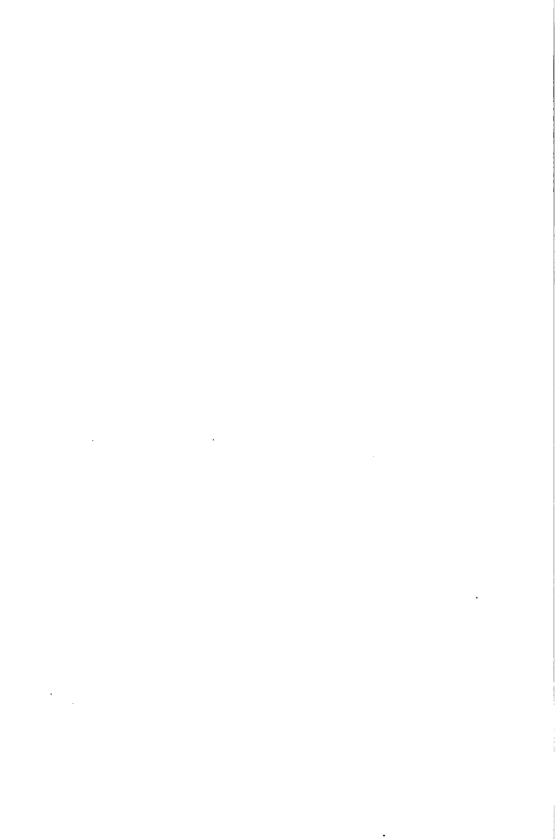
people; and for many years they made the Ocean House their Mr. Hussey was well spoken of by his guests summer home. for his kind and obliging manners and attention to their wants, and gained many friends by his gentlemanly deportment and disposition to please. He continued the business until 1879, when he sold the house to Mr. Fred T. Brown, of New York, who made large purchases of property at the Pool. Mr. Brown remodeled the house and changed its name to Sea-He also removed the outbuildings, laid out walks and drive-ways, and there is no hotel at the Pool that surpasses it In 1881 Mr. Brown opened it to the in fine appointments. public with Mr. Fred Yates as manager. In 1882 Mr. S. Newman was chosen manager, and his popularity as a landlord Latterly it has been under the managesoon became known. ment of Mr. J. A. Bailey, who has had much experience in hotel business, and, judging from the past, great success is predicted for the Sea-View.

In 1862 Capt. G. L. Evans commenced to entertain visitors at his place, which was known as the Ellsworth House. This house was well patronized, for its fine location made it at once a favorite resort. Capt. Evans' success was due to his kind and courteous manners, and he will ever be remembered by those who have gathered beneath his roof as an attentive and obliging landlord. Capt. Evans continued the business until 1876, when failing health obliged him to retire.

In this short sketch I have endeavored to give a brief outline of the summer hotels at the Pool, but for the want of time and space I am unable to enter more fully into the details as they have occurred from time to time since I became a visitor at that place. There is one fact which perhaps is worth mentioning, and that is, that not one of those who first started hotel business at the Pool is now living. They have crossed the shore of time, whose sands show the imprints of no returning footsteps. But they will ever live in the hearts of all those who remember the pleasant days they have enjoyed while at Biddeford Pool.

The History of the Pool is replete with reminiscences and

THE OLD CUTTS STORE, BIDDEFORD POOL, MAINE.



incidents. I shall not attempt to go deeply into its history, but will just call to mind a few facts in reference to the early settlement of the place and the origin of its name, and I trust this imperfect sketch may remind some one besides myself of the pleasant days passed there. It appears from history, that Richard Vines, the founder of the towns of Saco and Biddeford, had a patent right, under the English government, of the land now known as Biddeford Pool. This land, by title, was conveyed to one Jordan, who sold it, in 1658, to Brian Pendleton and Capt. Roger Spencer. In 1660 Spencer sold his part to Pendleton, who took up his abode there, and the place was known for many years as Pendleton's Neck. Rev. Seth Fletcher, well known among the early settlers of Maine, married Pendleton's only daughter, Mary, who had one child which they named Pendleton Fletcher. This child was adopted by his grandfather, who gave to him the land known as Pendleton's Neck, together with Wood Island and other property in the vicinity. Pendleton Fletcher took possession of the estate, bequeathed to him by his grandfather, about 1680, and the place has been known since that time as Fletcher's Neck. name it still retains and its geographical position is known by it. The name by which it is more familiarly known, at the present time, was adopted by the visitors.

In 1737 Batchelor Hussey, of Nantucket, bought one-half of Fletcher's Neck, together with Wood Island, of the Fletcher heirs. The next year Mr. Hussey built the house now known as the Mansion House, which was, as I have before stated, the first house to entertain visitors at the Pool. Capt. Thomas Cutts, of Saco, bought the other half of the property and moved there, not far from 1800. Capt. Cutts was a successful shipmaster, and at one time was sole owner and master of his ship. He made many prosperous voyages, being absent from home many years at a time. Soon after he retired from sea, he built a wharf and stores, and at once commenced ship-building on quite an extensive scale. When the war of 1812-'14 broke out he had quite a large number of ships which were engaged in

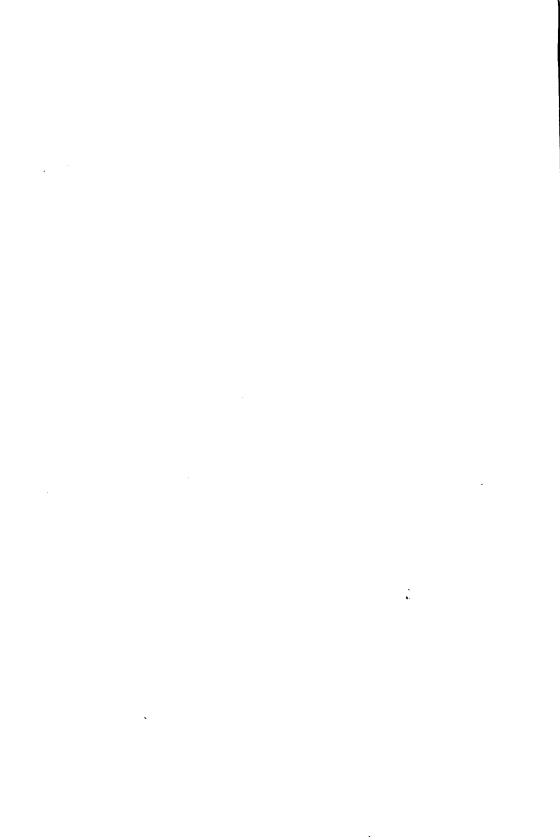
the West India trade. During the war, the English frigate Bulwark came in, anchored off Wood Island, and sent two boats on shore, commanded by the first lieutenant. As soon as they landed they commenced to destroy the property of Capt. Cutts. Three ships (the Harmoine, Catherine and Equator) were demolished, and one that was in the course of construction was burnt on the stocks. Some of the remains of the three vessels destroyed are still to be seen. Another ship was taken out to sea and held until redeemed by Capt. Cutts, he Not being satisfied with the depredations paying \$6,000. that had already been committed, the keys of the stores were demanded, and the sailors were allowed to help themselves to anything they wished in the shape of clothing, hats, caps, whiskey, rum, etc. Besides destroying two other small vessels that did not belong to Capt. Cutts, and which they did against orders, no other damage was done to the place. And it appeared, from what was afterward learned, that this work of destruction was the result of spite.

It seems that, previous to the war, the lieutenant of the Bulwark was in command of a brig, bound from the Provinces to Boston, with a load of grindstones. This vessel sprung aleak and he put into the Pool for a harbor, asking permission to unload the cargo on the wharf in order to find the leak. This was refused, and he was obliged to go to sea in a leaky vessel and make the best way he could to his point of destination.

After the death of Capt. Cutts, his son Thomas succeeded him in business, and he is spoken of, by the people of the Pool, as a man of sterling integrity and one whose heart was always open to the wants of those in need. He sold his property at the Pool and afterwards went West, where he accumulated quite a fortune, and won the respect and confidence of all who knew him. He died while in the prime of life, but his memory will ever live in the hearts of those who knew of his kind and benevolent acts. I can just remember him and the pleasant sails I have had up and down Saco river in his little white whale-boat.



WRECK OF THE "EQUATOR," BIDDEFORD POOL, MAINE.

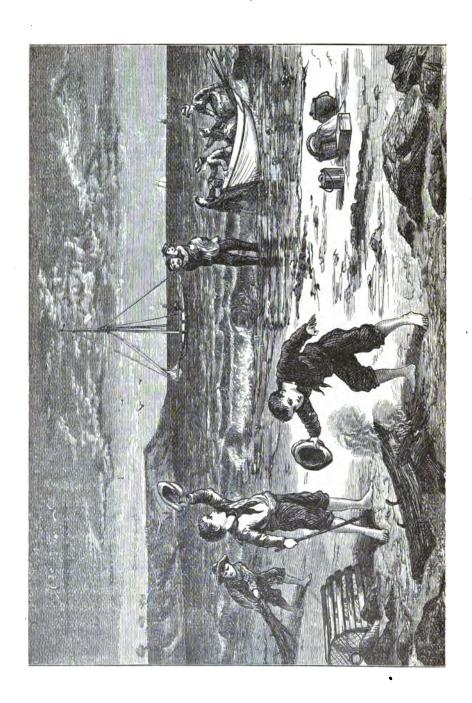


The stores and wharves built by Capt. Cutts are still standing, and, although the wharves are in a rather dilapidated condition, the stores look good for a number of years. The old store, as it is called, is one of the land-marks of the Pool. I can look back to the time when, a boy, I used to climb the winding stairs and go up into the cupola, where, with other boys of my age, I would sit for hours at a time, cracking nuts and loooking out upon the ocean, watching the vessels as they sailed up and down by the Pool. The view from the cupola was grand: Saco Bay with its islands, the harbor and shipping on the one hand, and the broad Atlantic on the other. I hardly pass the old store without being reminded of the changes that have taken place since the crew of the Bulwark set themselves up in business there.

When I first went to the Pool there were but thirteen families living there, with a population of about seventy-five. Only two of the heads of those families still survive. It gives me great pleasure to recall my early associations with those who have passed away, for I knew them for their christian virtues and social qualities, and I wish I could speak of them one by one, for the good impressions I had of them in my younger days have never been changed. It affords me much enjoyment to meet, from time to time, those two who are still living, and renew past friendship, for I always get something good when in their company. May peace and prosperity ever be their lot, and "their last days be their best days."

At the present time there are fifty-three families living there, with a population of about two hundred. Quite a number of the former inhabitants have moved away—some of whom have settled in the Western states, and others have found occupations nearer the old homestead.





A STORM AT THE POOL.

The different points of interest about Biddeford Pool are so graphically stated by Capt. W. F. Goldthwait, in a rhymed description of a storm at the Pool, that I cannot refrain from printing it here, as a local specimen of the intellectual merit of the locality. The changes it has undergone in preparing it for the press but make more apparent its original strength.

The clouds were gathering in the east,
And to the westward swiftly flew,
And o'er the southern sky they cast
Their deep and darkening hue.
The sea-bird, in her ocean nest,
Seemed noting the wild tempest's sway,
And, as she pecked her mottled breast,
Poured forth a timely lay:

"Though skies be dark, no fear have we Who live beside the heaving sea. We've watched the rise of many a storm, Have seen its power in every form, And Nature's phases aye unfold, In the wave that flashed and the cloud that rolled; The quack of the wild duck darting by, The loon's hoo-hoo, the sea-gull's cry; The distant lands, uplooming clear, In the evening's dewy atmosphere, And ships, that seem to sail in air, Uplifted by the mirage there;

The murky clouds that hurry past, The mists that gather thick and fast, The shifting winds, the eastern "glin," The waves, like mountains, rolling in: All these, and signs in every form, We've marked before the coming storm."

Hark to the Storm King's boisterous roar! List to the waves that lash the shore, Bringing from the far off sea Sounds of its awful minstrelsy! And, all along our rock-bound coast, The storm-fiends rage from post to post, And mermaids sing their wild refrain Which the winds whistle back again.

From Porpoise Cape to Wood Isle light The seas display their caps of white; Far o'er the Bay to Lizzie Cape The maddened surges roar and leap, And all around our shores, the while, The breakers into mountains pile; No quiet at the Pool is found Until the sea has reached its bound.

Upon the highest hill we stand And see the waves assail the land, Hurling their waters to our feet And damping us with vagrant sleet. We look away to Fortune's Rocks That whiten with the billowy shocks, And o'er the beach at old South Point, Where ocean seems all "out of joint."

Beach Island calls our gaze away, Half hidden in the foaming spray, And "Washerwoman" foams and boils, And wrings and twists in sudsy toils. To East Point is attached her line, On which her fleecy blankets shine; While there, where Dancing Berry lies, The furious waves assail the skies, And Gooseberry Isle and Isle of Wood Seem deluged by another flood.

Unlike that August day when we,
For cod and haddock outward bound,
Impelled the graceful Jennie B.
Off to famed Tanto fishing ground,

And, finding none, 't was made pretence
That quest of quiet brought us there;
"Ah yes," said Post, "and in that sense
We've found it, with a lot to spare."

Now darkness settles and we turn
To where the cheerful home fires burn,
And think of those upon the deep
For whom wives, mothers, sisters weep.
Wood Island light beams like a star,
To warn the sailors from afar,
While the deep-sounding bell we hear,
Proclaiming death and danger near.

And then our earnest prayers arise To God of ocean, earth, and skies, That he, by his Almighty arm, May save the sailor from all harm; But even in fear, oh Holy One, We humbly say, "Thy will be done."



THE INDUSTRIES OF THE POOL.

THE principal business of the Pool is fishing and lobster-catching. About two thousand lobster traps are used. Five or six small fishing crafts are owned here and are engaged in shore fishing, some of which do a "pleasuring" business in the summer. The fish taken off the coast are sword fish, halibut, blue fish, cod, haddock, mackerel, cusk, hake and dog-fish. During the months of August and September, 1881, the fishermen captured five hundred sword fish, weighing upon an average four hundred pounds each, for which they received from two to six cents per pound, according to the demand.

Let me illustrate fishing generally before giving an account of the particular kinds, in the capture of which I have had some experience; and I can perhaps do it better by giving a dialogue between myself and a "regular fisherman," trusting the reader will glean from this some information, which would take much longer if told in any other way:

AN OLD FISHERMAN INTERVIEWED.

- "Good morning, Captain," said I, (as I seated myself on a log beside an old skipper who had been out all night tending his trawls), "what luck did you have?"
- "Morning, sir," said he, as he shifted his quid of tobacco to the other side and hitched up his oil pants, "not much luck tonight."
 - "What was the matter; couldn't you get bait?"
 - "Well, bait is very skerce, but I managed to git a few small



GROUP OF THE NATIVES OF BIDDEFORD POOL, MAINE, ON STEAMBOAT WHARF.

• ٠ - mackerel, but the plaguy dog-fish are so plenty that they won't let a decent fish get onto the trawls."

- "The dog-fish, then, I take it, are not very profitable?"
- "Well, no, they ain't exactly, about this time; but I have seen the time when I could make something catching 'em."
- "Then there has been a time when dog-fish were worth catching?"
- "Yes, during the war, when oil, like gold, was way up, a man could make good wages at this kind of fishing; but sence then nobody wants to have anything to do with 'em."
 - "How do you manage to get the oil?"
- "Well, you see we take out the liver and throw the fish away; we put the liver into barrels and it makes out itself; then we dip the oil off for the market."
 - "How many does it take for a barrel of oil?"
- "Well, it takes about thirty to make a gallon, I reckon; so you see the fish are worth less than a cent apiece, which don't pay much, if you reckon your gear anything."
 - "What time of the year do you commence cod-fishing?"
- "Well, as a general thing, about the first of May, or as soon as fresh herring come."
 - "Where do the herring come from?"
- "They come in schools from the south, the same as other fish, and we catch 'em in nets and use 'em for bait."
 - "Do you always get a plenty?"
- "No, not allers, we are bothered to death, almost, sometimes, for bait; then agin we get 'nuff bait and there ain't no fish."
 - "Then I take it the fishermen have hard luck sometimes?"
- "Yes, the old saying's true, 'Fishermen's luck, wet foot and hungry inards,'"
 - "I suppose you find it pretty rough on the banks sometimes?"
- "Well, we do. We go out very often, get plenty of bait, set our trawls, and, before we get a chance to haul'em, it'll come on to blow and get so rough that we have to get under way and make a harbor, and leave our trawls until we get a chance to go after 'em. Sometimes we find 'em and sometimes we

don't, and when we don't we get new ones and try it agin. Sometimes when there's plenty of fish it will be so blowy and rough we can't get out for a week, and then agin we get out and there ain't no bait; so you see it's kinder hard work."

- "But you do have some good fishing?"
- "Yes, we hit on 'em once in a while. We get out, find plenty of bait and fish, have good weather, and then we jest hoe in, and when we are doing well we forget all about the bad luck."
 - "I think it must be exciting when the fish are biting good?"
- "Well, you bet it's jest fun; and then I would like to have you along when we get right into business. You'd find it different work from catching trout with a pin-hook."
 - "Do you find many halibut?"
 - "No, we don't; halibut is rather skerce on our coast."
 - "Where are halibut mostly caught?"
- "On George's and Grand Banks; very few catched on the inshore grounds."
 - "Do you fish for mackerel?"
- "Not much; we used to years ago, but they got to using seines and it broke 'em up, and it don't pay to try for 'em now. Catching mackerel, like everything else, has had its day, that is, catching 'em with a hook. I've seen the time when mackerel fishing has paid, but that was before the seines got about."
- "How many mackerel did you ever know one vessel's crew to catch in a day with a hook?"
 - "About seventy-five barrels."
 - "That would be lively work, I should think?"
- "Well, you bet it is. When a vessel's crew gets seventy-five barrels of mackerel in a day, and get 'em taken care of ready for fishing next day, they have got to keep their hands out of their trouses."
- "Did you experience the same difficulties mackerel-fishing that you did cod-fishing?"
- "Jest about the same; sometimes we would cruise a week without catching a fish, and then agin we would find a plenty of fish and they wouldn't bite at all."

- "Pretty exciting work when they do bite well, isn't it?"
- "Well, 'tis. When they take right hold in earnest, you can haul and slat 'em off as fast as you are a mind to. I think it is the best fishing that we have."
 - "Then the most mackerel are taken now with seines?"
 - "Yes they be."
- "How many did you ever know to be taken at one time with the seine?"
 - "About three hundred barrels."
 - "How do the fishermen who don't use the seine, like this?"
- "Well, they don't like it very well; it breaks up the mackrel that used to come in shore years ago, and the small boats did first-rate catching 'em, but now it is very seldom that they come into the bay, and when they do, they are so shy they won't bite."
 - "I understand they use steamers for seining?"
- "Yes, they do, but not for mackrel; the steamers are used for pogy-fishing."
 - "What use do they make of the porgy fish?"
- "They make oil out of them. They have factories where they extract the oil and the refuge they use for fertilizing."
 - "How does this branch of business pay?"
- "It don't pay very well on the coast of Maine. It used to, but them days are gone and the fishermen ain't sorry."
 - "Did it injure the fishing business?"
 - "Well, we think it did, a great deal."
 - "In what way?"
- "Well, they came right into the bay and drove all the pogys off so the fishermen couldn't git any for bait, and finally they broke up pogy fishing on the coast of Maine altogether."
 - "Do they follow the porgy business elsewhere?"
- "Yes, on New Jersey coast, on Long Island sound and around Block Island."
 - "Do you follow cod-fishing in the winter months?"
- "Well, we don't do much of it now; we used to have some fine vessels here, and we done well years ago winter fishing, but

fish got skerce and we had to go sò far for 'em, we had to give it up."

- "How far did you have to go?"
- "From ten to thirty miles the last of fishing, but twenty years ago we had good fishing right out here in our channel. Then we could do good business in our small boats."
- "How do you account for the scarcity of fish?"
- "Well, I think they have been catched up, so many fishing for 'em; and setting so many trawls has stopped 'em coming inshore."
 - "How many trawls did you use to a vessel?"
- "Well, we generally had about thirty-five hundred hooks to a man, and a vessel that carried a crew of ten men had about eight miles of fishing gear."
- "Pretty good string, that; and did you manage to get them all right?"
- "Well, no; sometimes we would have to leave 'em. It would come on to blow after we got 'em set, and we would have to go in without 'em; and when we went out agin, if we found 'em all right we was lucky; if not, we got some more."
- "Did you ever get caught out in a storm and have to weather it?"
- "Well, no, I never did, but have come pretty nigh it. Some of our boats have. We was out one day, four vessels of us, and jest before we got our trawls in it come on a regular old-fashioned snow storm; the wind was all around the compass and we started for a harbor as quick as we could, and as good luck would have it, two of our vessels got into the harbor jest after dark all right, but the other two didn't fare so well. One of 'em run ashore and done considerable damage, the other made the land, and in gibing over broke the main boom and had to anchor. It blowed so hard they parted both cables and had to put to sea. When the storm abated they got into Gloucester putty well shook up. They lost their trawls and boats, but by skillful management saved themselves and vessel."
 - "I don't think I should fancy that kind of fishing."

"Well, I guess you wouldn't. It is all well enough for them who have good homes and plenty of everything, to set down by a good fire on a cold winter's night and enjoy themselves, but I guess they don't think much about the poor fishermen who are out buffeting the terrible storms, trying to make an honest living for themselves and families."

"I hope they get well paid for the hardships they undergo?"

"Well, they don't, allers, as the fish-buyers take advantage of 'em, and the men who risk their lives git the least pay."

"Yes, but we have to pay a good round price at the market for fish."

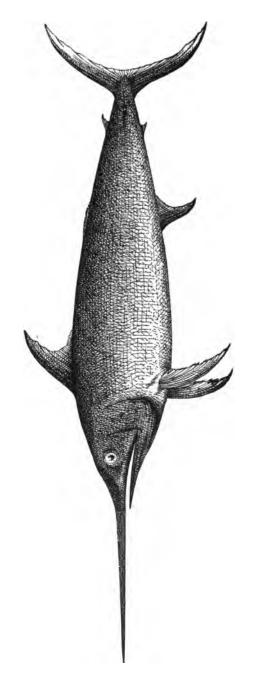
"That's jest it, they beat the fishermen down and they have to take what they can git, and the marketman fixes his price to suit himself; so you see how it is. The fisherman in order to make a living, and a poor one at that, has to sell for what he can git, while the marketman makes his own price, and a pretty good one it is, ginerally."

SWORD-FISH.

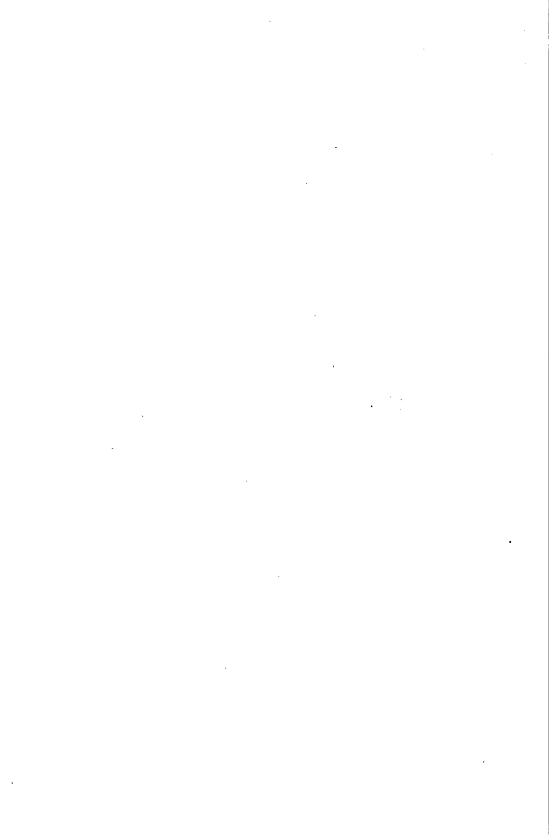
Taking sword fish, is one of the industries of the Pool. "In form this fish resembles the mackerel. The scales are very small; the jaws proper, and sometimes the sword, are crowded with small, acute teeth, often hardly perceptible. Swordfish are swift swimmers, and feed on mackerel and other The common species attain a length of twelve to small fish. twenty feet, and are found in the Mediterranean and on both They make their appearance at Block sides of the Atlantic. Island, Long Island Sound, early in the summer, and are found, during the summer and early fall, all along the coast from New York to Cape Sable, having here and there favorite feeding grounds. Their flesh, both fresh and salted, is highly esteemed, as food, and in Boston, Portland, and other seaports. forms a considerable article of commerce. They seldom attack other large fish, except when in company with the thresher or fox shark. They have been known to pounce upon a whale, and after a terrible contest, come off victorious."

The modus operandi of capture is as follows:

All vessels that are fitted for sword-fishing, have, at the extreme end of the bowsprit, what is called a pulpit. an iron rod, one and a half inches thick and three feet long, with an iron semi-circular band firmly secured at the top. It is well fastened to the bowsprit in an upright position. pooner stands on the end of the bowsprit, within the iron pulpit, ready not to preach, but to practice. ten feet long and two inches in diameter, with an iron socket attached, is used to drive the dart into the fish. The dart is made of iron or composition, six inches long, and shaped like an arrow-head. The warp or line used is four hundred and eighty feet long, about the size of a common clothes line. end of the line is secured to the dart, the other end is fastened to a barrel, and all but forty feet is wound around the same in such a manner that in case it is used it easily runs off. pole and dart are always kept at the pulpit when cruising for sword-fish. It is the habit of these fish, in the warm days of. summer, to come to the surface of the water for food, when they can readily be detected by the dorsal fin which protrudes above the water. When discovered by "the lookout" at the masthead, the course of the vessel is laid right for the monster, and, with a little breeze to fill the sails, she soon gets near enough for the man in the pulpit to strike. As soon as the dart is thrown into the fish and he recovers from his surprise (for just a few seconds), he starts for the bottom of the sea like a shot out of a gun, and the barrel which is always in readiness is thrown overboard. This being done, another dart and line are procured and everything is ready for another strike. another fish is not seen very soon, one of the crew takes the dory, rows to the barrel attached to the fish, and proceeds to This work in most cases is soon accomplished. haul him in. The fish is hauled up alongside the dory and a lance is put through his gills, to which he soon succumbs. He is then hoisted on board the vessel and the crew are all ready for another capture.



SWORD FISH.



Having thus given the method of capturing the fish, let us imagine ourselves on board the yacht "Jennie B." setting sail for the sword-fish ground. I had invited a number of my friends to join me on this trip. Three of them — a gentleman from New York, one from Boston, and the other from Lawrence, Mass.,—kindly accepted my invitation. The morning was beautiful, and at 5, A. M., we slipped our mooring and filled away with every prospect of a good day. While we were gliding along to our destined point, some fifteen miles south-east from the Pool, the time was taken up with pleasant reminiscences of the sea, and some pretty good fish stories were told. All on board were cheerful and hoping for a successful voyage. At 10:30, A. M., we were out fifteen miles from land, and had reached the place where we expected to have some sport. And here let me give this day's experience just as I witnessed it on board of my own craft. The captain had taken his stand in the pulpit, ready for action, while a man was stationed at the foremast-head to discover the fish. large number of vessels were seen engaged in the same business as ourselves. The "lookout" had seen a splash quite a distance from us, and all hands were scanning the surface of the deep, with

> Eyes out to windward, Eyes out to leeward, Eyes out ahead of us, Sword-fish to mark:

Sword-fish to right of us, Sword-fish to left of us, Sword-fish in front of us, Out on a lark.

I was consulting my watch noting the time, (II, A. M.), when the "lookout" sighted the long-expected object off our lee bow about two hundred yards distant. But the wind, which had been very light all the morning, had entirely left us now, and we were becalmed. Captain Jim, nothing daunted, called the lookout at the mast-head, and, after putting the needed gear into the small boat, they proceeded to execute

the design of capturing this fish. All eyes were bent upon They rowed very cautiously until they got as near as they thought proper, when Captain Jim was seen to rise in the boat, and, with a well-directed throw, the dart was driven deep into the monster. So well was the work done, that in thirty minutes from the time the blow was struck, our first sword-fish lay on the deck of the Jennie B., we having used the main halvards to hoist him on board. We soon saw another, but, before we could get ready to attack, he disappeared. The breeze had now sprung up and it looked a little more favorable for our business. Will Hussey was now in the pulpit, and, with his quick eye, discovered another sworder a short distance on our weather bow. Captain Jim was at the helm, and, by skillful manœuvering, managed to get our vessel in good position, when, before the fish was aware of any danger, the dart was driven clear through his body. This operation was immediately followed by throwing the barrel overboard to which the line was attached; and, with this arrangement, we could leave Mr. Fish to his own meditation, while we sought other conquests. We cruised around for some time without discovering another, and concluded to take the one on board that was fast to the barrel. Just as we were ready to carry out this design, Captain Jim, who was now in the pulpit, sang out "Luff, luff, quick! there's one right there!" and, sure enough, not fifty yards distant, the betraying fin could be With the same skill displayed that had marked our success thus far, we were soon in position for Captain Jim to give the fish what he called a "settler," and so it proved, for with strong arm and iron nerve he settled the dart nearly through his body.

As it was getting toward 2, P. M., we thought best not to throw the barrel overboard, but hold it in readiness to do so if need be, accordingly we held on to the fish, on board our vessel, hauling in on the line as he came near the surface and paying out as he went down. And here I had an opportunity to watch one of these sea monsters in his dying struggles, and I will ven-

ture to say that if they knew their strength, and how to use it, no vessel would dare to approach them. While we were at work with this one, from the deck of our vessel, one of the men was sent with the small boat to take care of the fish attached to the barrel, so as to have the care of both prizes going on at once, but found it no boy's play to handle the one from the deck. We would haul him up some twenty fathoms, then down he would go again like lightning. This was done a number of times, and we found we had a lively player on the end of the line. But Captain Jim got tired of this fun. "Now," said he, "let us all take hold and rouse the fellow up." All hands agreed to this, and soon we had our prize up along side the yacht, when with the aid of the lance, we were once more conquerors. We had just got our fish on deck, when the small boat came along side with the other trophy, and in a short time three fine sword-fish, weighing about five hundred pounds each, lay side by side on deck. It was just sixty minutes from the time we struck our last fish that we had him safely on board. It being now 3, P. M., I told the captain that we had better shape our course for the harbor, for I was anxious that my friends who were with me, and had enjoyed so well the sport of the day, should reach their homes before night.

We were very tired, for there had been no time since 10, A. M., that we had not been actively engaged in doing something towards the accomplishment of our object. While we were sailing along with a fair breeze towards our port of destination, our time was taken up in pleasant conversation, and the haps and mishaps of the sword-fishermen were freely discussed. Noticing that Captain Jim was getting a little uneasy, and guessing the cause of his anxiety, I ventured to ask him if he thought we should be able to get into the harbor before dark. He shook his head and replied, "No sir, I don't." We soon found out that he was correct in his prediction, for at 6, P. M., the wind had entirely left us, our gallant little craft lay becalmed on the bosom of the mighty deep, seven miles from land, and when the sun disappeared

behind the western hills it went down upon as fine a sword-fish day as ever was seen outside of Biddeford Pool. At 9, P. M., a light wind sprang up, and, trimming our sails to catch the breeze, we were once more bound on our homeward track, reaching our homes at II, P. M., all highly delighted with this day's sport. It is pleasant to note the fact that all the other Pool boats were successful, each capturing from one to four sword-fish.

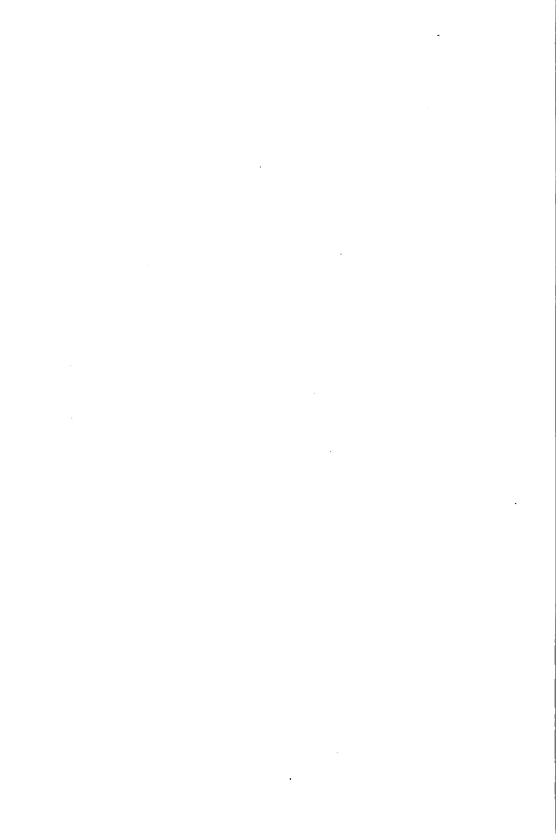
During August and September, each year, many fishermen and mackerel seiners go prepared with sword-fish gear, that they may employ their time and make a dollar during the scarcity of mackerel and other fish.

There are many sword-fish incidents worth relating.

One of the Pool fishermen related to me the fact that his vessel at one time had out eight barrels, and the extreme ones were eight miles apart when they commenced to take them up. All were secured. One fish, after being struck, went straight to the bottom, sixty fathoms, or three hundred and sixty feet, and stuck fast in the mud; it required the united efforts of eight men to extricate him. When he was brought to the surface it was found that the whole length of the sword and half his head had been buried in the mud. Sword-fish swim with great velocity. Vessels very often go into dock for repairs, and, when examined, planks have been found pierced by the swords of these fish. There are now on exhibition, in some of the museums, veritable swords broken off just as they penetrated planks five inches or more in thickness. Sword-fish have been captured of one thousand pounds weight. Sometimes after being struck, instead of remaining on the bottom or keeping quiet, they have been known to carry a dory, with the end of the line made fast to it, for two miles to windward at a rapid rate.

A few years ago, I, with two others, captured a seven hundred pound sword-fish; the story is rather an interesting one. We were sailing along quietly, when, suddenly, a sword-fish made his appearance. We were far from being ready for

THE "JENNIE B" SWORD FISHING.



action, the warp in a tub being all kinked up from its last use. The dart was not attached to the rod, but there were lively times on that craft, and the striker was just able to reach the end of the bowsprit, with no time, we may say, to put himself even in a safe position to strike. Giving the monster a lefthanded blow, which roused his spirit, down quicker than a flash the fish went for the bottom of the sea, the line fouled upon the anchor, and we had fine music forward. Fortunately the line did not catch so as to part it. It was drawn rapidly out of the tub, sometimes all clear, again in bunches, and the way the loose line flew around that boat was a caution to landsmen. Before he had run out all the line, one of the men got the dory alongside, and, placing the remaining line in the same, and attaching the end to the bow of the dory in such a manner that it could be easily cast off, if necessary, he remarked-"Now if you will hold on to your end of the line, I will mine." That fish carried the man two miles to windward, and by the time we could beat up to the boat, he had the fish up to the surface of the water and lashed to the side of the dory. It may be easily imagined that we felt quite proud over our trophy.

These fish are sometimes taken by splitting a mackerel and laying in it a hook; a long line is then attached and the mackerel is trolled through the water; but the method first described is the more common one.

The following is an exceedingly interesting account of the capture of sword-fish, by a Cape Cod correspondent of a city paper, giving the particulars in the Cape dialect, also another part, not generally known, of the difficulty attending the procurement of the young sword-fish:

"I've got a standin' offer of one hundred dollers for the first young so'dfish I can git," said a Cape Cod sword-fisherman. "You'd think," he continued, "that that was a hefty sort of an offer, when the fish is only bringin' eight cents a pound, but, ye see, there's never been a so'dfish seen in American waters less nor forty pounds, and only one at that. Where do they breed? Wall, that's the very p'int. They don't breed—leastwise around these diggins. I've been a so'dfishing around the south of the cape goin' on twenty year', and never see one less nor four foot long, and I've took thousands of 'em.

age wound had proved fatal. It would have been an act of justice, had we been close enough, had Capt. Frank set the 'grains' into the back of the fratricidal fish.

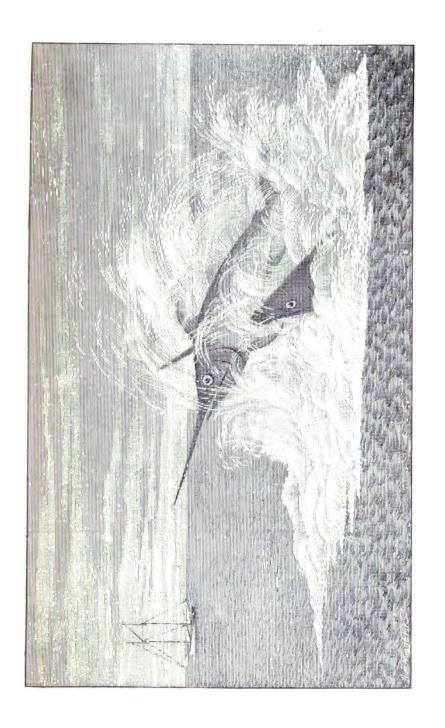
SWORD-FISH CAPTURE ON THE JENNIE B.

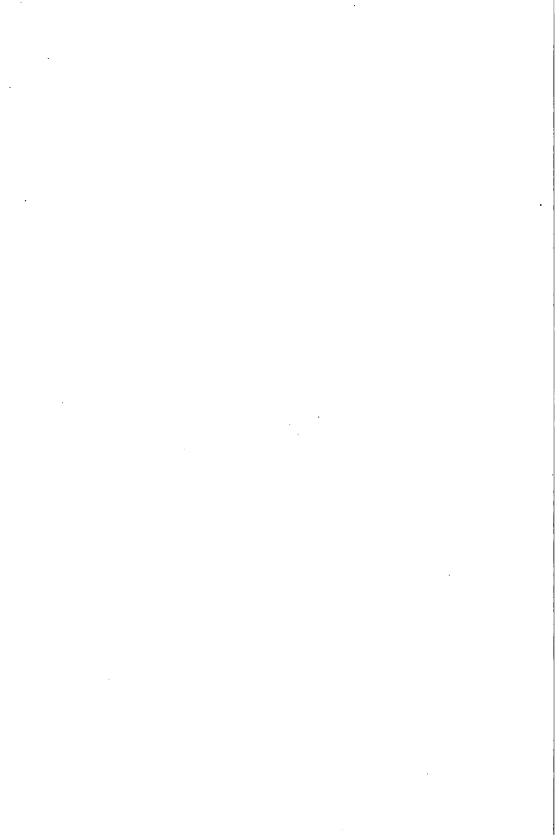
The following is a letter from the proprietor of the Jennie B. to a young friend, describing the capture of a monster of the deep off Biddeford Pool, during his summer vacation:—

BIDDEFORD POOL, MAINE, Aug. 11, 1884.

My Dear Don:

If you can be patient for a short time, I will tell you the story of one of my recent exploits in the Jennie B., that may be of interest to you. On Saturday morning at five o'clock we started on a fishing cruise, our crew consisting of Capt. Frank, Albert, Edward Sly, Peter D. Smith and myself. We started with a fair wind, and were soon outside of Wood Island. After a little discussion as to our destination we concluded that the Peak should be our objective point. The breeze continued good and the prospects were fine for the day, although the wind from the N. E. had made the sea a little lumpy. We had breakfast about six o'clock, consisting of boiled eggs, boned turkey, bread and butter and tea. By this time all eyes were upon the shore marks, and when Old Orchard Sands came in sight by Wood Island, and the Butter-Pot hills over the high ground of Cape Porpoise, we knew that the Peak had been reached, and, rounding to, we dropped anchor in twenty-six fathoms of water. We immediately commenced fishing with mackerel for bait, but the dogs were so fierce, and there were so many of them on the rail at the same time — the dog-killer being in requisition a little too often — we abandoned fresh bait and took to clams. Matters soon changed, and it was not long before we had some fine cod and haddock in our kid, the cod weighing from five to thirty pounds. The haddock were nice large specimens, two of which were dressed for an excellent chowder, that was ready at 12:30; but, as the chowder was about to be passed out upon deck, there came a cry: "A sword-fish! See him there just astern of us!" "Shall we go for him?" asked Capt. Frank. "Yes, by all means," said I, and quickly our anchor was upon deck, the Jennie B. giving chase to the finny monster. "There he breaches," said Albert, "and," he continued, "I have never known a sword-fish to fin after such a performance as that." We still plowed on, however, but no sword-fish came in sight. Order was given to about ship and proceed to the inner Peak, for the purpose of drifting for cod-fish, when, before proceeding far, we discovered a small sword-fish to windward. "He aint bigger'n one of our cod-fish," said Albert. Capt. Frank threw the dart at him, but it did not take effect. In a few minutes we discovered a large fish to leeward, and went for him. When the Jennie B. was in good position, the dart, that had been airing on the end of the pole, was quickly transferred by Capt. Frank to his fishship below, while passing under the bow of our good schooner. Albert shouted, from aloft, "I guess you have back-boned that sword-fish, Frank." Frank said nothing,





but immediately came aft to surperintend matters. Our barrel had been left behind by mistake, so the end of the warp had been attached to the dory and made ready to be cast off at a moment's warning. Frank paid out the line, travelling around the stern of the vessel, as he wished to keep the warp from fouling, and brought the dory up along-side as the last foot of the warp was being payed out. "Now whoever is going with this team has got to hurry up," said Capt. Frank. Albert and I jumped in, and swiftly we left the side of the Jennie B., bound south. Albert remarked: "I never knew a sword-fish to take a man toward home." How the water gurgled at the bow of our boat as she glided over the main at a 2.40 gait! After hauling us a mile or so, his lordship stopped for a little rest, and we embraced the opportunity for getting a little slack line to come and go on in our dory. Then Albert commenced hauling, and I sat amidship with the oars, in order to obey the command of "back water!" Three times the fish was hauled almost to the surface, and as many times we were treated to a gratuity in the shape of an ocean "skip," with our single hitch. Each time the fish came to the surface, and getting wind of something foreign to his nature, he would be off, but the fourth time the slapping of the monster's tail against the warp was more weak. I thought of the Portland vessel's dory that was pierced by a sword-fish, and divested myself of my barvel, laving it one side - not wishing to use it, however, to stuff into holes made by the sword-fish, but to be free from any incumbrance in case of accident. Soon Albert remarked: "He is growing feeble, and I think that in a few minutes you will see a handsome fish alongside." And we did. The warp was passed to me, and Albert, raising the fish's head with the gaff, reached his gills and made old ocean pretty red in the vicinity of the dory. He then took a rope and lashed the tail of the fish, which was secured to the stern of the dory, the line still attached, and we rowed toward the Jennie B., that had all the time been trying to reach us against the wind. A few moments and the huge fish was on the vessel's deck, hoisted on board by the main throat halyards. And now for his length. The sword lay under the seat, as far aft as possible, while his tail rested upon the thwart by the mainmast, all of thirteen feet; weight about four hundred pounds. The fish had one of the longest and finest swords I ever saw. In all snug, and Capt. Frank, noticing that the fish was well ironed, sarcastically said to Albert: "He looks as though he was backboned!" Albert said nothing, but put on one of those looks you have seen him wear when thinking of the dog in the back yard, as he is questioned regarding the fruit there. We immediately wheeled around for home - time, one hour in capturing the fish. It was now 4, P. M., the breeze light, and our progress homeward slow, until we found ourselves becalmed four miles S. E. of Wood Island, and remained in almost the same position for three hours, with the exception of being brought nearer the land by the incoming tide. At 11, P. M. we passed in by Gooseberry Island, and at 11:30 we rounded to and made fast to our moorings, where the Jennie B. was allowed to rest upon the rise and fall of the tide till Monday morning. And there ends the tale of my fish.

Saturday was a good day for sword-fish. The Brookmeyer yacht, "The Whisper," was fortunate enough to get one, and another one was secured by

Capt. J. E. Goldthwait from the bow of the "Emma Pearl," after two dories had chased the fish for an hour or two. It happened thus: It was calm, and Chas. Verrill and J. E. G. in one dory, and Paul Hussey and another man in a second dory went in pursuit of the same fish, but the fish ran the gauntlet of both and escaped, and the chase was abandoned. Afterwards the Brookmeyer's dory, manned by C. V. and J. E. G., went in chase, this time in company with James Bruell, (Emma Pearl). No chance offering, Capt. J. E. G. proposed taking the pulpit of the Emma Pearl, and letting James and Atwater Bruell row, so, with wind and rowing, the sword-fish was taken.

J. W. S.

HALIBUT.

"This fish is characterized by a flat, oblong body, compressed vertically. The eyes and colored surface are on the right side; the lips large and fleshy, the lower jaw the longer. The common species grow to a length of from three to six feet, varying in weight from one hundred to five hundred pounds. The right side is of an almost dark brown, and the left or under surface pure white. It is found from the coast of New York to Greenland and also on the Northern shores of Europe. The Boston market is supplied principally from George's and Grand Banks, and Nantucket Shoals. In summer it is caught by hook and line in shallow water, retiring to deeper in the winter; it is abundant in the Bay of Fundy and in the waters of Nova Scotia. It is an exceedingly voracious fish, feeding upon cod, haddock, skates, mackerel, flounders and other species of similar size."

The following extract from my diary I give for the benefit of the young folks:

August 3, 1882.

This is "children's day." In many places excursion parties are given for the benefit of children. The older people give up the day and devote their time wholly to the little ones. Now at the sea-side there are scores of children to amuse, when they get tired of playing in the sand or climbing the rocks. Fishing from the rocks is good sport, and taking a dory and rowing among the islands, is exhilarating, but deep-sea fishing seems to be the crowning delight of both old and young. The

Jennie B. was brought into requisition for the sole benefit of the children — those belonging to my family. The start for the outside fishing-ground was made at II, A. M. We anchored and fished awhile near the "Hussey Buoy" about two miles out, but not finding fish very plenty, we "up anchor" and proceeded to the eastern edge of the channel, anchoring alongside of Captain Wm. M. Hussey, who had some gentlemen on board his boat; a St. Louis party. Not much luck there, either, only a few dog-fish and a stray cod or two. The children, however, enjoyed the sport.

I had been in the habit, when out, of baiting a line and letting it "set" in the hope of perhaps capturing a halibut. By the voracious appetites of the dog-fish we were getting rather short of bait, so I cut up a pollock and baited my big line with that, and presently I felt something of more than ordinary size tugging away at the end of the line. I settled the hook into whatever it was, and commenced to draw. I presume that, had I been a regular fisherman, I should not have let the fish had his own way so much, but I did not want to get completely "tuckered out," and I was not hasty in drawing in my line. I made a mistake, as the sequel will show.

Frank Goldthwait unreeled the line and Captain James E. Goldthwait stood by with the gaff. The fish ran out nearly all my double shot line of forty-five fathoms — two hundred and seventy feet — and I remarked to Frank, "Bend on the sword-fish warp if you need it, and let the fish have the barrel to play with." But after running twice, his "lordship" was willing to come my way once more, and with the perspiration standing on my brow, I hauled the "critter," whatever it was, up about two-thirds of the distance from the bottom, when suddenly my gear gave away and down went the fish deeper into his native element, leaving me standing in blank astonishment upon the deck of the yacht, a disappointed lover of fish. Upon drawing in my line I found that the hook had been "boned" and the point gone.

I determined to try again, but what was I to do for bait?

A fine cusk lay in the tub, from which was cut a tempting morsel, and down went my line again for "chances." remarked to Capt. Jim, "I think that we had better run in soon on account of the children, as the clouds begin to look dark, with every appearance of a thunder shower;" but, with almost the same breath, I continued, "I guess we had better wait a minute, as I have a rousing bite from some kind of a large fish." A few heavy "sags" stimulated my courage to pull a halibut, and, fetching the line a sudden draw, I succeeded in hooking the prize. I drew the fish a fathom or two; "Here, Frank," said I, "you don't seem to be very busy, here is a job for you to haul in this fish." He took hold in right good earnest, and, hand-over-hand, he hauled the "unknown" till it was near the surface of the water. To go under the boat was the next move of the fish, which hindered the capture very much. As soon as we caught a glimpse of him we recognized a good sized halibut, but the fish was not ours yet, by any means. What were we to do? As the fish struggled on the surface of the water, to have used the gaff would have been poor judgment, as the power he possessed, would have wrenched the gaff from the hand of the striker, and, probably, down the fish would have gone by "jigging" the hook clear. The hook was set deep in the throat. This was awkward, as it was difficult to give the usual "settler". upon the snout. As soon as the fish became in a measure quiet, and the revolving motion ceased, he got that desired settler upon the end of his nose. The splashing and foaming of old ocean then ceased, and striking the gaff deep into the upper jaw of the fish, we made the matter pretty certain that we might carry that halibut home. It was quite a lift to bring the fish over the rail of the Jennie B., but strong arms accomplished it, and soon the treasure lay in the bottom of the vessel, much to the satisfaction of the children, who went into ecstasies over the capture. Upon reaching shore the halibut was put upon the scales and he "tipped the beam" at one hundred and sixty-two pounds.

When the halibut was landed, many gathered around to view the trophy, and one person, with a merry twinkle of the eye, remarked: "I say, what do they charge for halibut when they are taken out of a 'Bank fisherman' outside the Pool, on their way to Gloucester?" thinking, doubtless, to create a laugh, as such a thing might occur. Just at that moment the fish raised his tail and brought it down upon the pebbly beach with considerable force, when the gentleman remarked, "I've nothing further to say, as I see the fish is able to tell his own 'tale.'" Knowing my long familiarity with the Pool, a St. Louis gentleman upon being asked by a fisherman why he did not go out and catch a halibut, replied—"Well, when I have been at the Pool playing marbles with the natives for forty years or so, I'll go out and get a halibut."

Perhaps I may take some credit to myself, as this halibut was the only one taken in the immediate vicinity of the Pool during the summer, and I may add I am the only "visitor" that ever succeeded in capturing a halibut at Biddeford Pool within the memory of the oldest inhabitant; so it was said. Of course, I cannot vouch for this saying — this is the story as I heard it.

Supplementary to the foregoing halibut story I will relate another experience, and although recently published, yet I reproduce it to show the voracity of this fish:

A gentleman from New York was recommended to go to some fishing place upon the coast of Maine for his health, and, wishing to give zest to his sailing, tried fishing one day. The writer was very willing to do all for his comfort possible, so arranged a trip among the deep-sea peoples. Having never caught a salt water fish, he was jubilant over the prospect of landing a fine cod or haddock, never dreaming of anything larger. The first time his line went down there was a response, and, quite elated, he drew his hook to the surface to find that a hungry cod had seized the tempting bait of another line also, and there the fish was with both hooks in his mouth. The skipper remarked, "You will have to try again, Mr. B.,

I don't see that you have captured more than half a fish." The line was soon down again, and in a moment, with a nervous twitch of the hand and a countenance bespeaking pleasure, he exclaimed, "Oh, I've got a buster this time!" The skipper glanced toward him, and seeing him tugging away at the line, remarked, "I wouldn't pull out that rock, please, as we shall have difficulty in getting ashore if the water all runs out through that hole!" The response was, "That's no rock, I tell you, I've got a big fish on; my! how he pulls; there is no mistake about that."

The skipper by this time was convinced that such was the case, and supposing it to be a halibut cautioned B. about handling him. In a moment, with hands thrown up, he ejaculated, "Oh! he's gone; that's too bad!" Hauling in the line he found his hook gone. While the captain was putting on a hook, the gentleman fished with the captain's line upon the other side of the boat. He in a moment shouted, "Oh! I've got him again, or another just as big!" The captain, seeing that he had a big fish of some kind, said, "Now be careful; that pulls like a halibut, don't let him 'jig' on you, if you do you will lose him." But the gentleman was much excited, not being used to hauling large fish, and he had his gear broken again. Misfortune number two for him.

All this time the writer was quietly fishing at the forward part of the boat, and only letting up long enough to witness the fun, with the disappointing sequel. Said he to himself, "There seem to be some monsters below; I guess I will go for them and see what luck I'll have." A good, strong line was brought into requisition, and, baiting the hook with a tempting morsel of mackerel, it was not many minutes before I had a big fish hooked. The first thing to do was to have another line "bent on," as he had already began to run on the bottom. I hauled him three times nearly to the surface and as many times he had it all his own way. He ran out more than half of the second line, when he became weary and was willing to come my way. Brought to the surface the cap-

tain gave him a smart rap upon the nose, and, striking the gaff deep into him, the fish soon lay low in the bottom of the boat — a seventy pound halibut — and, strange to say, had the two hooks in him that the gentleman in the stern of the boat had lost only a little while before; one in his mouth and the other in his side. He evidently had been caught by swimming around the hook, and, by his hauling so hard, the captain thought Mr. B. had hold of a rock. The second time, the fish was hauled by the mouth, but by "jigging" broke away, leaving the other hook in his jaw. It may be believed that there was some jollity over that funny capture.

THE LOBSTER.

This "long-tailed crustacea," well known at the Pool, enters so minutely into the constituents of man's gastronomic taste, that he deserves extended mention — more, indeed, than can be given here. Like some eminent wit, he is welcomed at every table, where he holds most prominent position. The elements in him are so finely mixed that he draws all to him. smooth and oily in his manner, yet has a tinge of sharp acridity that gives him a charming piquancy, and is always well dressed for company. He is not, naturally, a handsome beast, but, like Capt. John Smith's alligator, has a very amiable expression when he smiles. His habits, however, are stern, as he moves backward in going forward, and, like a mediæval warrior, cases himself in armor, which he casts off but once a year. He is a pugnacious fellow, before coming into society, and is always getting into hot water. Though nominally a cold water man, he steams it, sometimes, and is seen thereafter as red as others make themselves by the same process. His reputation, however, does not suffer much by it, as his friends and admirers like him all the better for his ruddy aspect. He is called, in his native element, "The Shore Sentinel," or "Sea Soldier," and it is supposed that the British soldier adopted the color of his uniform from that of the lobster. The lobster's uniform at first is black, which fades into red upon being

boiled: the British remains the same to the clo'es. A negro philosopher was deceived by this similarity of color. A party of soldiers insulted him by taunting him about his blackness. He turned upon them with the remark: "You needn't say nuffin—you was as black as me afore you was b'iled." is no mistaking the identity of a lobster, especially if you should try to shake hands with him before he loses his sea habits. Nickleby had an obscure idea regarding him when she recommended to Madeline Bray, who was recovering from fever, that she take a dozen lobsters on the half shell, as a means of recuperation, although she admitted that oysters might be the thing she had in her mind, and the great English naturalist, Sir Joseph Banks, conceived the idea that fleas and lobsters were of the same family, and boiled a lot to convince a party of savants, to find that his theory was fallacious.

As defined by the books, the lobster is "a well known marine crustacean. The common lobster of the United States has the general form of the craw fish, the shell of which is olive, or blackish green, with darker spots and blotches, that, as is well known, become red by boiling. The principal organ of locomotion is the tail, which by a sudden bending underneath, sends the animal backward with great velocity. One of the most striking peculiarities of the lobster is the ease and frequency with which the large claws are separated, either by accident or from injury received in their constant attacks upon each other. These and the other limbs are soon replaced, and it is very common to catch one of these animals with one claw absent or smaller than its fellow. They are said frequently to lose them after a heavy clap of thunder, at which they are always much disturbed. They vary in length as caught for the market, from one to two feet, though specimens are seen considerably larger than this, and in weight from two to fifteen They are common in the market, and are considered a pounds. great delicacy."

They are caught principally in "traps," the construction of which is as follows: Two ends and a centre piece, made of

hard wood and half round, say at the base by two feet, joined a substantial piece of hard wood. Then laths are used of the whole length and laid open, the space left being the width of a lath, so the openings are uniform. At either end strong cord made into a net work, concave and ending in a circle of six inches in diameter; then a hoop completes it. These are held in place by being attached, by a line, to the centre of sides of the trap. A cover is made by nailing three short cleats across say three or four laths, with hinges, of pieces of leather, and are commonly introduced just below the centre of the trap on top. A cord with a wooden pin is attached, which serves to hold the bait in place and also to fasten the door of the trap.

In the summer months these traps are set near shore and around the rocky bottoms near ledges and islands, and the plan is to sink them, with a strong line attached, and a floating buoy to mark the spot. The winter lobstering is much more hazardous, as the traps are arranged upon a long trawl and sunk to the bottom some two or three miles from land, and in ten to twenty fathoms. Commonly a small vessel will carry, say six men and as many dories, and while the men are drawing their traps, the vessel is jogged by a man who has that part of the programme to perform, and shares equally with the catchers. The lobsters are brought on shore alive and placed in cars, and when sufficient quantities are collected, a smack containing a "well" takes them, or they are boiled and shipped to the nearest market. There is a large business carried on all along the New England shore, of which Biddeford Pool gets her share.

Boston is a great market for the lobster, and its commonness renders it dangerous lest the supply give out. The legislature of Maine has secured, by law, the protection of the lobster during the months of August, September and October, when it is casting its shell and is not wholesome to eat; and Massachusetts has passed a law to regulate the size at which they may be caught and sold (10½ inches long), which is regarded no more than the idle wind, each dealer keeping a measure of his own, suited to all circumstances.

Lobsters are to be had all the year around, sick or not, and a law like that of Maine is needed, which would afford, perhaps, ample protection if the law were properly regarded, and all prosecuted who take them or keep them for sale during the months named. The consumption of lobsters for the home market and for canning is enormous.

So much is the lobster used for food in Boston, that it has been said by some one, doubtless sardonically, that its people are distinguished by lobster traits of look and action, and that it would not be strange to see those at table get up and crawl around among the dishes; and another declared that Bostonians derive so much phosphorus from eating lobsters that many of them glow in the dark like decayed fish. This is a lurid slander, that no one of any intelligence can believe, the utterer being actuated by a frivolous desire to make light of the Hub.

THE BLUE-FISH.

It is within but a few years, comparatively, that the bluefish has appeared, to any great extent, in our waters, and its coming, in any great numbers, is a matter of uncertainty, depending mainly upon the abundance of the alewife and herring that flock up the rivers to their spawning places. The Merrimac, Piscataqua and Saco rivers are famous resorts for them, in their season, and they afford rare sport for their captors, who find in them a very difficult prey. They are very voracious and seize a bait with avidity, but it requires the utmost skill and activity to "land them" in a boat. They double and turn and rush ahead, and, if the hook is not securely settled, they will shake it out of their jaws and escape, requiring a very adroit fisherman to master them. If not rapped on the head, the moment they are captured, it is not quite safe, especially to a novice, to put his finger in the mouth of a blue-fish in extracting the hook, for the long and sharp teeth of the fish may close on the intruding digit, instinctively or maliciously, and inflict serious injury. There have been cases where fingers have been bitten to the bone by the struggling victim. In

pursuit of their food they are very destructive, and not at all particular about "eating clean" as they go along, for where they have made a dash into a school of herring or young mackerel, thousands of wounded and dead fish float upon the water, with parts bitten out of them, presenting evidence of the reckless waste of these ravenous feeders. They are caught in rivers, by anchoring boats in the eddy and throwing a line—furnished with an inverted eelskin bait, a bare hook at the end, the skin drawn up over the line to prevent it from being bitten off—into the channel through which they pass, and, on the open water, by trolling a line, baited in the same manner, over the stern of sailing vessels, which affords exhilerating sport.

During a season when the blue fish were plenty in the Merrimac, a small party was formed in Newburyport for a day's fishing down the river. The party was to consist of but five, and all were on the qui vive for the promised enjoyment. Merrimac wherry was chartered for the day, a craft of the most anomalous character, almost as broad as long, with one mast stepped at the bow, and made to meet a regirement that she should be proof against upsetting. It was a very roomy boat for fishing, and, although her salling qualities might not much excel those of a mud-dredger, she was safe and clean, very desirable qualities to the two amateur fishermen of the party. One of these, was a homeopathic physician, whose "path" had never been upon deep water, but who went into the spirit of this treat with a real old school enthusiasm. He was on hand promptly on the morning of the excursion, as if he had been summoned to a consultation, or some case demanding immediate attention, but he had left his book of medicines at home with the other paraphernalia of his profession, and appeared as fresh and bright as a man off duty should appear. It being so pleasurable an affair — only an excursion down the river — that he had made no change in his dress, was immaculate from hat to boots, and wore his gloves to prevent the sun from burning his hands. He was jolly at the prospect. It was a bright day. The river, away down to its mouth, seemed as smooth as a mirror. A gentle and fair breeze merely rippled its surface, and never did an old tub of a boat start for a good time under fairer auspices. The doctor was very efficient in getting ready.

"Now, doctor," said the one who took the place of captain, "just haul in that painter when they cast it off."

The doctor looked perplexed at the command. There were but two boys on the wharf, and not the sign of a paint pot or anything denoting the presence of a painter.

- "What?" said he in a very unnautical style.
- "Pull that rope in," cried the skipper, as one of the boys threw it into the water.
- "Oh, that's it, is it?" said the doctor, and he pulled in the line in a most ultra-marine manner, as the bark bowled away before the wind.

The doctor ruminated somewhat upon the word "painter," but the scene diverted his attention, as he saw the shore receding, as it seemed, and the novelty of his surroundings gave him great satisfaction. At length they reached the mouth of the river across which a sand bar lay, save a narrow channel through which the tide was rushing rapidly, and the blue-fish were seen, in numbers, jumping their length out of the water, following the incoming flood. The bar was submerged, and the swollen water outside came tumbling over it in great billows, making a serious swash inside. The captain brought the boat near the tide.

"Over killock," he said, and the boat, at her moorings, danced merrily.

The lines were already adjusted, and, throwing over into the channel, there were immediate bites, the captain drawing in the first fish — an eight pounder — and several succeeding, that made the affair exceedingly interesting. No one thought of his neighbor; all were intent on the sport.

"Hello!" said the captain, at length, "what's the matter?"

The doctor had thrown over with the rest, but had not caught any, though several had tackled his bait, and a deep

sigh from him had attracted the skipper's attention. He was pale as a sheet, except where a faint blue line ran from his nostrils down to his chin, and his face wore an expression of deep misery.

"I—I do n't feel quite well," he said in reply to the captain's question. "I wish I was at home behind the old horse. I did n't think we were coming so far."

"You've hooked a fish, doctor!" cried one, excitedly; "pull him in!"

The doctor did n't move. Had every fish in the river been on his line, he would not have cared. The fish was pulled in for him and scored to his account. The doctor was sick, and no mistake. He hung over the gunwale as if he were admiring himself in the mirroring sea, and then, unable to support himself, he lay down in the boat, as well as he could, and begged like a sick girl, to be put on shore. A dory was called and he was carried in, where he lay on the unsheltered sand without moving a muscle. When the tide turned the fish refused to bite, and the killock was raised for the return. The doctor still lay on his back, and the boat was headed for him.

"Come, doctor," said the captain, "we are going home now. Get on board. The voyage up will be but a small pill affair. Like your similar curious decanter. Be cured by a hair of the same dog that bit you."

"Can't go," he said in a faint tone. "Won't you send a carriage for me? There's a good fellow."

"Carriage! Why here you are on a desolate island, inhabited only by savages—cannibals. They'll pick your bones before to-morrow."

"Well, then I suppose I must go. But be easy, won't you? and do n't bear too hard on the tiller."

All was promised and he was assisted on board the boat. It was unfortunate for the doctor that wind and tide were both against his comfort. The boat had to be "beat up," and, as the wind had increased, she laid over on her several tacks even to taking in water. As she luffed or wore the doctor was able

to take advantage of the change and kept on the windward side, but at times he half dosed and the coming about would bring his face directly into the water on the leeward side, but he made no complaint. But the best and the worst of times must end, and after a tedious sail the wharf was reached, upon which the doctor was hoisted utterly unable to help himself.

- "Doctor," said the skipper, "I should n't like to have you prescribe for me to-day."
 - "Why not?" he asked faintly.
- "Oh, because you are in such condition that you might give me an overdose, or something of the sort."
- "True, but I shall prescribe for myself, allopathically, in a most decided manner."
 - "What?"
- "Not to go blue-fishing again. It has been a blue fishing day for me." And he walked feebly up the wharf, a chartered boy behind him dragging the big blue-fish the doctor had caught.

It is strange that so little is said about blue-fish by ichthyologists and sportsmen when their capture is so fascinating, and their eating so delicious. Frank Forrester, however, devotes a space to them, and "enthuses" somewhat over their capture, giving them place as a fish for ladies to assist in the sport of taking. He says: "There are many worse kinds of sport than this; the swift motion of the vessel, the dashing spray, and the rapid biting of the fish, combine to create a very pleasurable excitement." To those who have caught blue-fish this will be considered very faint praise. Forrester calls the blue-fish "a great mackerel," which it really is, and when cooked, fresh from the water, it affords a most delightful meal -- "superlative," Forrester terms it. It has only been known in American waters since 1810. Since then its appearing, in great numbers, has been but at intervals, though every year there are enough to yield rare sport and considerable profit to fishermen and amateurs; but they desert the rivers for years, and their coming into inland

streams is eagerly looked for. They are common on the New Jersey coast, where they are caught from the shore by the thousand, and at their coming everybody is on the qui vive. The shore fishers use for a lure what they call a "squid"—a bare hook cased at the shank in a metal covering — which they throw into the surf, where the fish have followed the herring ashore; the fishers then run rapidly back from the beach, the line over their shoulder, instead of pulling in by hand, the fish, almost invariably, having taken the glittering bait. Multitudes are caught in this way and are salted for future use. Trolling, as it is practiced in New England waters, is nearly the same, but is not attended with the excitement of the Jersey fishing.

An instance of trolling is related, where a party went out, before daylight, from one of our eastern ports, to indulge in the sport. One of the gentlemen, with the injunction, "Call me early," threw over his trolling line and turned in, "with boots and barvel on," to be ready with the first. Like the doctor in the preceding story, he had been disturbed somewhat by the motion of the vessel, but not enough to destroy his interest in the sport anticipated. His soul was in arms and eager, and when he was aroused by a cry, before the day had well broke, that something was on his line, he started from his berth with the alacrity of a boy, though weighing two hundred pounds, and rushed upon deck, where all were looking at his line, that apparently a big fish was attached to, which swayed and jerked about as if trying to escape.

"Mr. Pool, you're in luck," said one; "first fish."

"Yes," said another, "and a big one, too. Pool takes the pool."

All had something to say, and Pool, the proprietor of the line, began to "pool" in. He was quite near-sighted and somewhat confused by being so suddenly called, but he could see the object struggling in the water, the vessel going at a brisk rate, and every nerve was strained to its utmost tension as he drew in the line.

"You must pull quick for blue-fish," one suggested, and he

put in with a will, but his hand slipped, in his eagerness, and he had to commence over again, pulling in hand over hand. It was an exciting moment for him. The line again slipped from his control.

"That's a fish worth trying for," said a tempter by his side. "Hold to him, Pool."

With a firmer grip upon the line, the fisherman pulled, and after considerable further struggle the coveted object was drawn up to the vessel and lifted aboard, revealing an ancient umbrella that some one had hooked on to the line! There was a laugh, of course, that any practical joke, however idiotic, will cause, but the victim took it good naturedly, and said his turn to laugh would happen some time, which it did, then and there, for he caught more fish than any one on board, the perpetrator of the joke scoring none.

A story has recently found its way into print about a man who went into an eating house to obtain a fish dinner. "We have nothing but blue-fish, sir," said the waiter. "No matter," replied the hungry man; "I don't care anything about the color. I am color blind."

Immense numbers of blue-fish are caught in weirs on Cape Cod, and the market is principally supplied by the fishermen of the Cape. See chapter on "Weirs."

COD-FISHING.

One of the most important industries of the Pool is cod-fishing. This has been carried on more extensively in years past than at present, although it is still pursued with no little success. There are eight species of cod belonging to North America. The "American" cod is the common species of the New England coast, ranging from New York to the St. Lawrence river. This species grows to a great size, one having been caught weighing one hundred and seven pounds.

The Bank cod is taken on the Grand Banks, in the deep water off the coast of Newfoundland, Nova Scotia and Labrador, and is found from the coast of Maine to 67 degrees latitude. One of these fish has been caught, weighing ninety pounds. The Tom-Cod is found along the American coast, from New York to Nova Scotia and New Brunswick, at all seasons of the year. It frequently ascends rivers. The cod is an exceedingly voracious fish, devouring everything in its way in the shape of small fish, crustacea, marine worms and shell-fish. Many deep sea "specimens" have been taken from the stomach of the cod that could be had in no other way. They are gregarious in their habits, going in schools of greater or less size, and are governed in their movements by the presence or absence of food, the spawning instinct, and the temperature of the water. When migrating, the schools are quite dense, though by no means like schools of menhaden or mackerel. But when they reach the feeding ground, they seem to distribute themselves over a large area, though more or less drawn together in little groups. This is particularly noticeable on the shore when the fish are moving about in search of food. The fishermen soon capture all that chance to be on one patch of rocks, and must then row to another in order to find a new supply.

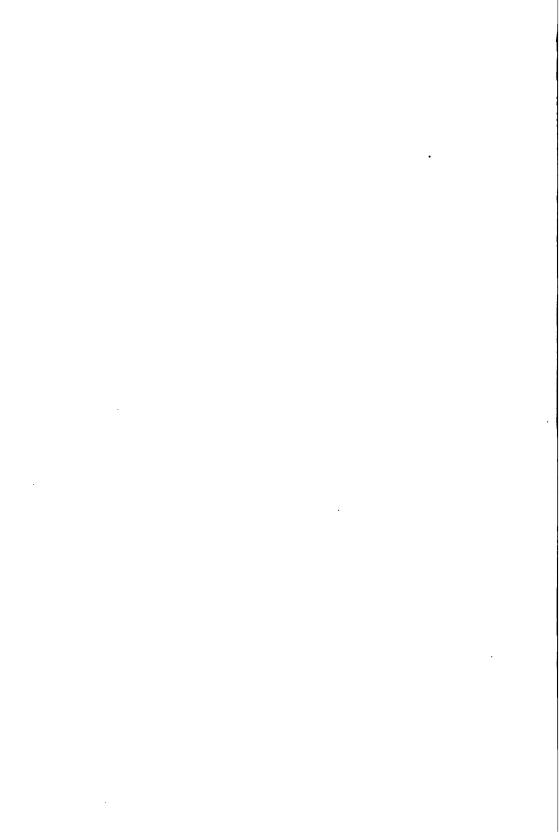
These fish sometimes make long journeys from one bank to another, and, indeed, from one region to a very distant one. It is, of course, nearly impossible to trace their movements at such times, and one can usually only guess at the place whence they came, or distance traveled. It is generally acknowledged by the fishermen, that, during the feeding season, fish are plenty only where food exists in considerable quantity, and that after "cleaning out" one part of the bank they go elsewhere. In moving from one bank to another, where the intervening depth is much greater, it seems probable that instead of following the bottom they swim in a horizontal plane, following a stratum of nearly uniform density and temperature. The finding of pebbles or small stones in their stomachs is not an uncommon occurrence. The fishermen regard this as an unfailing sign that

when morning came they hauled them and found nothing. The wind being quite high, the sea rough, and the prospect for a catch not very flattering, two of the vessels got under way and made a harbor. The crew on board the other vessel concluded to hold on and await results. spent the day in fixing their gear, and at night set their nets in hopes to get the desired bait. The watch was set and everything on board made snug for the night. morning came they hauled their nets and found bait in plenty. The wind had changed during the night from south to north-east and it was raining quite hard. daunted they went to work with a will, found fish plenty, and, in three days from the time they left home, they returned with as good a fare as ever was landed at the At another time fish being scarce on Tanto and other inshore grounds, one of the Pool skippers concluded to take a run to Kettle Bottom, thirty-five miles distant, and try his luck. As he was well acquainted with the ground, he anchored his vessel on the right spot, and, in less than three days, succeeded in getting his fare.

Many cases might be mentioned, where less than a week was consumed in getting a full fare. To show that there is another side to the fishing business, where the uncertainty comes in, I will mention one of the many that occur. Another vessel belonging to the Pool, anchored on Kettle Bottom, and the crew had great hopes of a speedy catch. They set their trawls, but, before they could haul them, a gale sprung up, the schooner's hawser parted, and they were obliged to run to Portland for a harbor, losing all their trawls, anchor and cable. This frequently occurs; but I only mention one to show that there are two sides to the fishing business. But there are other things that the fishermen have to contend with besides gales, storms, and a One of these is the shark, which I menscarcity of fish. tion below.

It is the custom of the fishermen, when at anchor on the

BIDDEFORD POOL LANDING-NATIVES AT WORK.



fishing ground, to set their nets at sundown, from the stern of their vessel, for bait. These nets are hauled at midnight, the herring taken out, and set again. times from one to three sharks are caught entangled in the They wind themselves up so completely that it often takes hours to clear them, and in the struggles to get free, the net is sometimes spoilt for present use. certainly aggravating, and I am informed that the fishermen do not always use mild language on these occasions. story is told of a fisherman who was at work clearing the sharks from his nets as a schooner came near, the captain of which asked him how Petit Menan bore. The answer he gave showed that Petit Menan was far from his mind; and for a sequel to the story, I refer my readers to some of the Pool fishermen, who will give them the facts in the case.

Trawling, which is the general mode of taking fish at present, was brought into operation at the Pool in 1857 in a very small way at first. A man with a large cheese-box under his arm was seen going on board his vessel. This was the first intimation that anything different from the old method of hand-lining was going to facilitate the catching of fish, and since the days of the old cheese-box, with its hundred hooks, trawling has increased wonderfully, which I have shown to my readers in the conversation with the old fisherman.

Boston, Gloucester, Rockport, Pigeon Cove, Newbury-port, Portsmouth, Cape Porpoise, Portland and the Pool, are the markets where the fishermen have sold their fish. Previous to 1860 the fish were salted and dried for market; but since that time nearly all the fish caught are sold fresh or in pickle.

Mr. Duncan Burnett is at present engaged in the fish business at the Pool. He has been established there a number of years, buying fish, lobsters, and anything in the fish line the fishermen have to sell.

I find that most of our fishermen, all along our great extent of sea-coast, take great pride in studying the habits of the numerous kinds of fish and animals that inhabit the great deep.

Scientists, aided by government, have done much to develop the resources of the ocean. Prof. Baird has had his drag-net down to the bottom of the sea all along our coast. He has brought to the surface hundreds of different specimens of fish and animals, and nearly every day something new is dragged to light from beneath the sea. But we must not forget that to the fishermen we owe much for this branch of service. For, while in the pursuit of their business for a livelihood, new fishing grounds are discovered by them, and they seldom make a trip without bringing in something new and interesting. And if they are not able to give to all the fish they catch their right classification, they are constantly finding new species in places where the dredging net has not been.

A FISHING EPISODE.

It is a delightful morning and everything in nature seems to combine to make mankind happy. The sky is clear, with not a cloud to be seen, and what little air is stirring is pure and bracing. It is such a morning as one can enjoy, away from the city, with its heat, smoke, turmoil and busy cares, by the side of old ocean, where there is nothing to mar his pleasure, but much to make him cheerful and glad. The Atlantic ocean lies before us with scarcely a ripple upon its bosom. As our eyes stretch far out across its waters, hundreds of white sails can be seen, that dot this "mighty sea."

I had just seated myself under my awning, drinking in these pure draughts from nature, and thinking what I should busy myself about for the day, when the voice of the captain awoke me from my reverie, with his morning salutation, asking what plans I had in view.

Fishing in shore had been rather dull for a few days, bait was very scarce, and as my stay at the Pool was drawing to a close, I wanted to have one more good fishing trip before I packed my trunks. After consulting with the captain, I concluded to take a run down to Richmond's Island (nine miles distant), stop there over night, get bait in the morning, and start early for the fishing ground.

With everything ready to enjoy a good night's rest on board the Jennie B., we set sail at II, A. M., shaping our course for the fishing ground, with the intention of spending an hour or two trying for fish. The wind was fair and light, just enough to keep our "main boom out," as the old sailors say, while not a ripple was to be seen as far as the eye could reach. I wonder if any of my readers have ever enjoyed such a day as this, on the ocean. If they never have, I wish I could describe to them the delights and pleasures of this hour, out upon the blue sea, surrounded by one vast waste of water, which seems like a sheet of glass, extending far beyond the gaze, the sun out of a cloudless sky sending its rays like streaks of gold across this boundless main, while all around us on every hand can be seen

"Ships, sailing to and fro Like birds upon their flight, So silently they go."

At 2, P. M., we were out nine miles from land, and there fell a great calm upon the face of the deep, and we were in that calm. "As the tired bairn nestles to its mother's breast," so rested our gallant craft upon the bosom of the great waters. Those who love only the busy, bustling pleasures of the town, would have found no enjoyment here; but to me, the grandeur of this hour far surpassed the gay and festive scenes of life. Not a sound could be heard save the notes of the sea gulls as they winged their way, hither and thither, in quest of food. Now and then some monster of the deep would leave his watery home below

and come to the surface, and we just got a glimpse of these wanderers of the sea. It was now 5, P. M. The breeze was springing up, and the captain said we must shape our course for our destined port if we would reach it before night. Fishing was out of question with us at that time, although we could see several small craft that seemed to be trying for sword-fish. But we must up and away, and with a good breeze, we were on our course for the island Just as the sun was sinking below the western sky we rounded to and anchored in Richmond's Island harbor.

At midnight I awoke from a refreshing sleep, and my ear caught the sound of wind whistling through the rigging. I went on deck and found the captain there. I asked him what he thought the weather would be. "Well, it don't look very pleasant now," he replied, "but it may clear up by morning. I think," he continued, "we had better take another nap." At this suggestion we went below and turned in.

When the first dawn of light broke in the east, rending in twain the curtain that night had drawn across the earth, I heard the voice of the captain, calling "All hands ahoy!" This was quickly responded to by all hands mustering on deck, to take a survey of the situation, which, in the main (or on the main, I should say), was not very inviting. The wind had shifted to the east during the night, and was blowing quite a gale. The sea, which but a few hours ago was so still and smooth, had been stirred to its depths by the breeze, and wave upon wave came rolling on shore. Dark, sombre clouds were driven across the western sky by the fury of the blast, and, altogether, the scene was not inspiring.

"Well, captain," said I, "what do you think of the prospect for a day's fishing?"

"Can't exactly tell, just now," remarked the skipper; "think we had better wait till the sun gets up, and then we can make up our minds what to do. We are all right here, and there will be nothing lost by waiting."

This suggestion of the captain I readily assented to, and as the bracing air of the ocean had sharpened my appetite, I thought it would be a good plan to drop a line to the finny tribe below to see if they were willing to subscribe to my wants. Dropping over a well-baited hook, I soon had the pleasure of landing on deck a couple dozen of fine perch.

The captain had sent a boat ashore for the bait which we had engaged the night before. While we were waiting for the return of the boat, a fire was built, the perch were cleaned, and things looked fair for a good, hearty breakfast. The boat returned with plenty of bait, and we were all right in that direction. At 8, A. M., the sun, which had been struggling all the morning to break through the clouds, had so far succeeded, that its rays could be seen and felt for miles around. The wind, that came in such fearful gusts at daylight, had decreased very much, and the aspect of the sea had changed since early dawn. Just at this time our cook came on deck and invited us below to partake of the morning meal that he had prepared for us, and you may be sure we were not backward in accepting the invitation. Nice fried perch, that were swimming in the water one hour ago, and steaming hot potatoes, greeted our eyes. With these, and edibles of various kinds, we soon satisfied the wants of the inner man. After breakfast we gathered on deck to hold a consultation, and came to this conclusion: We would get under weigh, put to sea, and if we found it too rough, bear up for the Pool; if the weather moderated, we would go to the fishing ground. 9, A. M., we got ready, and left the harbor with all its pleasant associations behind.

We sailed quite a distance without anything being said, and all the time it was "rolly-polly" with us, with considerable pitch-motion also, when I broke silence, remarking: "Well, captain, this looks very much as though we were headed for Tanto"—fifteen miles away. The cap-

tain, with a smile upon his face, replied, "We are going to have a good day overhead, but the sea will be rough; if you think you can stand it, why Tanto it is." Said I, "Stand it, why yes, if you think it is prudent to go." "Well," said the captain, "it is just like this: I have been watching the wind since we started, and I am confident that we shall have it to the southward in the afternoon. We can anchor on Tanto, fish a few hours, and have a fair wind home, but you must prepare yourself for a rough time, as far as lying at anchor is concerned."

The sun was out, and it was very pleasant. We bounded gracefully over the waves, which were now as "swelly" as they could be, as the wind, which had been north-east, was now veering to the eastward on its circuit, and getting lighter. At eleven o'clock we rounded to, with Cape Elizabeth bearing due north, and Tanto hill over the high ground of Biddeford. This told the story that we were upon the shoal ground. We dropped our anchor in thirty-eight fathoms of water and gave the boat the whole scope of our hawser—seven hundred and twenty feet—so that the pitching motion might be somewhat relieved, as it was; the boat occasionally putting her bowsprit under, but, on the whole, rode out the sea very satisfactorily.

We commenced to fish, and found that we had dropped our anchor on the right spot, for almost immediately the cod and pollock began to bite. The roughness of the sea was now a secondary matter, as the mind was occupied in a different direction; for already number one was in the tub in the shape of a twenty-five pound cod-fish, followed by two or three fine pollock of twenty pounds each. It was not a great while before the tub was full of fine fish—five hundred pounds—and not a fish of less weight than six pounds. We were pulling, baiting, hauling fish—losing some, of course, badly hooked—and occasionally killing a dog-fish on the rail, when all of a sudden the skipper said: "I guess I have got business to attend to, for

this one pulls like a shark." No sooner said than all five of the lines were called into action, each one with a supposed representative of the fish family upon the end. When the fish was nearly to the top of the water, the skipper said, "let him come up on my side of the boat;" and, slackening on the lines, a few minutes revealed a blue dogshark, weighing about one hundred pounds. After getting upon the captain's hook the fish, in his circuitous route, had wound up all the lines, and got tangled in such a manner that he came up tail first, and was held by that appendage till the lines could be stripped off and the fish knifed. There was hardly a square inch upon the shark's body, that was free from a cod-line. The shark bit off the hook that had caught him, but not until he had wound himself round with the other lines. It was the work of half an hour to get the lines in condition to resume fishing.

By this time, the dog-fish becoming numerous and voracious, it was impossible to get a bait to the bottom. The fact that our bait was rather soft, enabled the dog-fish to greatly increase their ravages. More than once the captain remarked, "Oh, if we only had a bushel of hard mackerel we would show you some large cod-fish; they are there, but the dog-fish steal the soft bait before it can reach the bottom." We had a few hard mackerel, and whenever either of the hooks were baited with that, a good cod or pollock was bounced upon the deck, verifying the captain's opinion.

We had no fault to find with the day's fishing, as we had indeed been busy from the time the anchor was dropped over the side till four o'clock, P. M.

We were some time in getting the anchor up, as the sea continued pretty rough, with the wind blowing strong from the southward. After heading our little craft homeward we found time to indulge in a hearty meal. The day had been really better than we reasonably could have expected from the morning outlook, and although the contrast was so great, compared with the day previous, vet.

looking at the matter in the right light, it was a splendid experience, and long to be remembered as a "red letter day" in my reminiscences of Biddeford Pool.

MACKEREL.

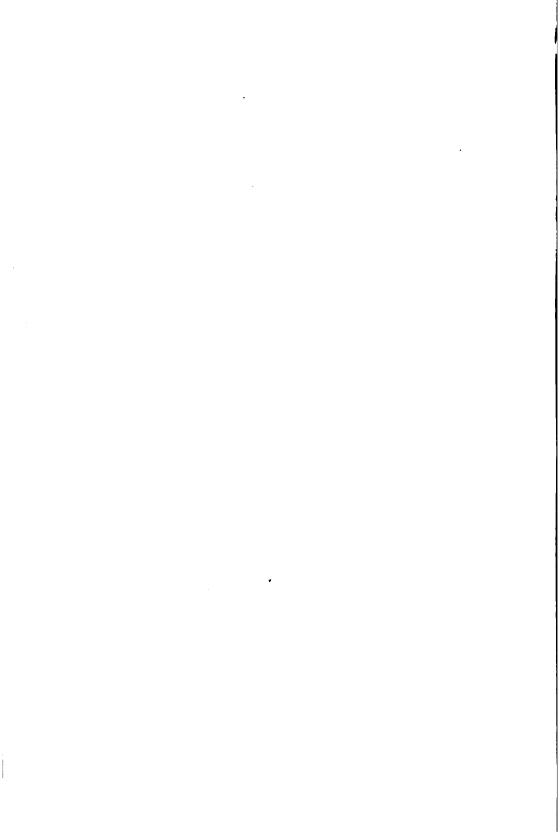
One of the principal industries at the Pool is mackerel fishing. The mackerel familiy includes, besides the commn variety, the bonito and its allied forces, the tunny, the pilot-fish, and the sword-fish. The common European mackerel is well known for its beauty and brilliant colors, and the elegance of its form; its scales are very small, delicate and smooth. According to good authority it performs migrations almost as extensive as the herring. probably inhabits almost every part of the European seas. It comes into shallow water at particular seasons to breed. Were it not for these periodical visits, no effective fishery could be carried on. It is caught in the waters of Great Britain from March to June. In winter mackerel retire to deep water, though a few are taken on the Cornish coast the year round. They are very voracious, feeding principally on the fry of other fish, and often devour the young of their own species. They grow rapidly and attain an average length, in some waters, of fifteen inches and in weight two pounds, though some considerably exceed this. On our own coasts they are smaller. They are considered best here, in July and August, rather than earlier or later in the season.

The mackerel season is a very busy and profitable one on the British coast. They are taken in large quantities by drift-nets, reaching about twenty feet below the surface, and extending more than a mile. These nets are set in the evening, and the fish, roaming at night, are caught in the meshes.

Mackerel are found from Greenland to the Mediterranean; in the Black sea, and sea of Azor; in waters of Australia, Cape Good Hope, the North Atlantic and Ameri-



THE MACKEREL.



can coasts. Mackerel are also found in large quantities off the west coast of South America, but their quality is inferior to those caught off our northern shores. They are not as fat and their flavor is less agreeable, having a bitter taste, caused, as some think, by the coppery nature of the bottom. They are rarely eaten, and, therefore, do not form an object for fishing. Mackerel fishing is carried on to a considerable extent on the coast of Norway. The season is short, but quite a business is done shipping fresh mackerel to England and other countries. In 1878 Capt. Markson, in the schooner Notice, of Gloucester, made a mackerel seining trip off the coast of Norway, but met with poor success.

The common mackerel of our coast make their appearance about the first of April, on the southern shore near Cape Hatteras. Where they pass the winter months it is hard to conjecture.

In conversation with an old philosopher, who has been engaged in the mackerel fishery for nearly half a century, and has made this subject a study, he gave me his opinion founded on a thorough investigation of the matter. theory of the old philosopher in regard to the habits of these fish, is this: When the mackerel leave the northern waters, they make their way south, keeping to the westward of the Gulf Stream until they strike the coasts of North and South Carolina, where they find a temperature and depth of water suited to their wants. Here they remain in a dormant state, keeping well below the surface, and thus avoid the heavy storms of winter that sweep across the southern shores. That this theory is correct One or two facts in connection I am not able to say. help to sustain it. One is, that when these fish leave for their southern home they are fat; but when first caught in spring they are very poor. This shows the absence of food, or a legarthic state of the fish that does not require food. The other is, that they are hardly ever seen south

of the 32d degree of latitude. When mackerel first appear on the southern coast, they take different routes on their journey to the waters of Maine and the Gulf of St. Lawrence. The in-shore schools (so called by the fishermen) keep near the shore and make their way northward as far as New Jersey. From this point they take a turn easterly, and seem to pursure a direct course to Block Island and Noman's Land. Some of these schools pass through Vineyard Sound, some through Muskeget Channel, but the greater part make their way outside Nantucket, cross over to Cape Cod, and arrive in Massachusetts Bay about the first of May. Here they remain for a few weeks and then continue their journey to the coast of Maine. Some of these schools keep very near the land, and are taken at different points, as they pass along, by the fishermen. The other schools take a wider range off the shore.

It is generally admitted that the spawning season commences, with these fish, near the first of May. undoubtedly true, and it accounts for the slow progress they make in journeying from Cape Cod to Mt. Desert. While the in-shore schools follow the coast line from Hatteras to the waters of Maine, the off-shore schools make the journey east by a more direct route. They seem to follow near the western edge of the Gulf Stream until they reach Georges Bank, and then strike across to Cape Sable, where they arrive about the same time that the in-shore schools reach Massachusetts Bay. Some of these schools work their way up the western shore of Cape Sable, as far as St. Mary's Bay, but the most of them continue their journey east to the Gulf of St. Lawrence. A few of them, however, go no farther east than Georges Bank, but remain in that vicinity until their return South. arriving in the waters of Maine and Gulf of St. Lawrence they remain until September, when they again take their journey for the southern coasts, following the course by which they came. The most of them disappear by the latter part of October, but a few are caught at Cape Cod, as late as the 25th of November.

Those who are well informed in regard to the habits of these fish, tell us that it is not absolutely necessary for mackerel to come into shallow water to deposit their spawn, and that propagation is equally successful from one to a hundred miles from shore. This, no doubt, is correct, for we must bear in mind that the breeding season does not come to all mackerel at the same time; and the same laws that govern the spawning instinct, provide also for them a proper place to generate, whether it be in the harbors and bays, or in mid-ocean.

Modes of capture. - The different methods of taking mackerel are by seine, weirs, hook, drag and set-nets. The seine, which is universally used by the fishermen, is constructed upon the same plan, in the main, as the herring net. It is from three hundred to five hundred feet long, and from seventy-five to one hundred and fifty feet in depth. This is weighted at the bottom with lead, that it may sink very quickly; to the top, floats of cork are attached to keep this part on the surface of the water. When a school of mackerel is seen, the crew jump into the seine boat, in which the seine has previously been put, and man the oars, while the captain takes the steering oar and directs the movements of the boat. Two of the stoutest are detailed to throw the seine over at the command of the skipper.

Mackerel, as I have before stated, come to the surface of the water in schools, and when they get into the right position, which the skipper with his knowledge of the business can readily tell, the command to "Pull away, boys!" is given, and is responded to with a will by the crew. At a word from the captain, the work of throwing the seine commences, and the boat is directed in such a manner, that a complete circle is made around the fish. When the seine is all out of the boat, the crew lay hold of the purse

lines which run along the bottom of the seine, and, quicker than I can tell it, the bottom of the seine is drawn together, and the fish are impounded. If the fishermen are successful in capturing the school, the vessel is brought up, and made fast to the seine, and the work of taking care of the fish commences. This is done by the use of dip-nets, that are put down into the seine, and filled with fish, then hoisted on board with a tackle. If they are to be sold fresh, they are put in the hold of the vessel with plenty of ice to keep them until they are carried to market. If not sold fresh, they are split, salted, and packed in barrels.

Another mode of capture is by the use of drag-nets. These are set from the vessel, and many good hauls are obtained. One great hindrance to drag-net fishing is dogfish and sharks, and they always make their appearance just at the time that the fishermen do not wish to see them. Great quantities of mackerel are taken in fish weirs that are constructed all along the coast, in different places, from Block Island to Nova Scotia. The old method of taking mackerel with line and jig, or hooking, as it is called, was carried on for half a century with great success. But since seines, drag-nets, and fish weirs have come into general use, hand-lining has not been a paying business. Upwards of five hundred vessels and boats are engaged, during the mackerel season, in taking these fish, and from the time that they appear on the southern coast, until they disappear for winter quarters, they are constantly sought after by the fishermen, both day and night. When we take into consideration the vast amount of nets, seines and weirs used for their capture, and the big fish that pursue them for food, we almost wonder that they are not totally destroyed; but, with all this array against them, they seem to increase from year to year. Many instances of big trips might be related, but I have neither the time nor space to give them. That my readers may have an idea of the quantity taken during the season, I will state that the catch at Gloucester for the year 1881, was 163,851 barrels; of this number, 50,548 barrels were sold fresh.

MACKEREL FISHING AT BIDDEFORD POOL.—This fishing has not been a paying business for the Pool fishermen for a number of years, which is owing to the absence of these fish from the shoals and places they formerly frequented. The use of seines has, no doubt, been the means of breaking up the shore schools, and driving them from their favorite feeding grounds. The time has been, within the writer's remembrance, when the Pool fishermen were very successful in this branch of industry, and many skippers, from Newburyport and other places, have taken their fares from the shoals and ledges around Wood Island and vicin-Fishing from dories, with line and jig, was the usual method of taking the fish, for in this way the fishermen could easily shift from one shoal to another. probably no fishing that gives so much pleasure to the fisher, be he an adept or novice in the art, as catching mackerel when they bite well. A few instances can be given showing the enthusiasm of those who have participated in the sport. Two gentlemen, visitors at the Pool, one an orthodox clergyman, went out, with one of the Pool skippers, to try their skill in capturing a few of the finny They succeeded in getting on the right spot, and in a short time had a school of mackerel alongside the boata very good biting one. They were delighted at the good luck they were having, for the fish came in over the side of the boat in fine style. The skipper related some experiences of his own, where he had been fishing with a large crew, and the mackerel were biting so savagely that, with pulling, hauling and slatting them off, they seemed to literally rain on deck. Just at this moment the clerical gentleman had a few good bites, and, bringing his victims on deck, remarked that he should call this a very good sprinkling.

The season of '82 was not a favorable one, among the Pool

fishermen, for taking mackerel. The fish did not make their appearance there, in any great numbers, until the first of September, though a few were caught previous to this, by Capt. W. W. Rich, with the seine. The absence of these fish from the coast, explains, no doubt, the scarcity of sword-fish in the waters they frequently inhabit.

In addition to the mention of mackerel fishing in a general way, I have the pleasure to present to my readers an account of this industry during the season just passed, 1885. Although the general catch along the coast has been less than on previous years, yet the scenes at different points have been very interesting to the looker-on. During the month of August, or really the latter part of the month, over two hundred sail of the mackerel fleet could be seen daily from our snug little seashore place, Biddeford Pool, and frequently as many as one hundred vessels would quarter for the night in the harbor. One scene in particular must have been very interesting to the people at the Pool and at Old Orchard, for during the whole of one week from seventy-five to one hundred sail of seiners were stretched along the shore from Biddeford Pool to Richmond's Island, and many in close proximity to the large hotels at Old Orchard Beach. Many of the vessels got good hauls of numbers one and two mackerel, though on account of the depth of the water, it being shallow, many seines were damaged in hauling them. Fine schools of large mackerel were taken just outside of Wood Island. The schools were small, (say ten to twenty barrels each), but the fish very large and fat. It was my pleasure, when out one day cod-fishing, to witness the operation of throwing a net, and I found my written statements verified in every particular in regard to the throwing of a net and the capture of the fish. After the vessel got alongside of the net, I went on board and saw the plan of dipping the fish from the net on to the deck of the vessel. Although a small school, they were the finest, largest, and fattest mackerel my eye ever beheld, in number about ten barrels. When we were returning that day, Albert, who always had a keen eye to windward and elsewhere, said to me, "Do you see that fore staysail schooner off Cape Elizabeth?" "Yes," I replied, "I see several vessels, but I can hardly make out the fore staysail one." "Well, I can, and that is the Joseph Warren; I have been watching her for some minutes. She has shot her seine, and now it is alongside of the vessel, and they are dipping out the mackerel. Now remember the day and the hour, and see if I haven't got pretty good eyesight; if she didn't take in a school of mackerel at such a time." The Joseph Warren is the schooner spoken of in the introduction as having been recently added to the Biddeford Pool fleet. Subsequently, I found the statement about the Joseph Warren to be correct, and we will give Albert the credit of good sight and a clear head.

And now for a little description of catching mackerel with the hook. We had the best fishing with the hook, in the harbor and around the ledges off East and South Points, that has been known for twenty years. One morning early no less than twenty-five small boats, all belonging to the Pool, were seen engaged in the lively sport of catching mackerel, and all the boats, before 7 o'clock in the morning, had from one barrel to three barrels each. For at least a fortnight, the last of August, large mackerel were very plenty and readily taken by the hook.

I had the pleasure, during the summer, of taking out several visitors who desired to be made acquainted with mackerel catching, and one occasion, "childrens' day," afforded a rare treat for as noisy a set of juveniles as ever were afloat. And it was a rare treat, also, to lookers on. My little boy, Joe, was the leader of them all in boyish pranks. He was like Ariel, every where in the vessel at once, and engaged in all sorts of mischief, tending to show the deep interest in nautical matters of a navigator

not six years old. A school of mackerel was reached, and the boat was crowded by the school of fish, that almost forced themselves on board. Everybody threw their lines over and the mackerel were sharp to bite. Little Joe was in rare spirits, and betrayed the greatest excitement as he saw the air full of them as they were thrown on deck from the sea. When fortune first favored him with a bite. and he drew in a handsome fish, that was wriggling on his hook, he didn't know what to do. "Capt. Frank," he cried, in a voice of most ecstatic thrill, "how shall I undo him?" The captain showed him that the hook was but just fastened to the lip of the fish, and that, by holding the line firm and giving the fish a slap upon the deck, it would tear out. The little fellow put it in practice, and was as expert as any body in the "undoing" of them. This was to him rather the best part of the sport, and he was ready to stand, and "undo" all that were caught. With regard to such schools, or shoals, when they are very large and crowd around the vessel, the water is so thick with them, that it seems possible for one to step out and walk along on their backs.

The sport of catching mackerel with the hook has been so often described that we need not enter into particulars in regard to it. When they could not be caught on a drift by using toll bait, they were readily taken by what is termed trailing, or trolling, and it was very enlivening for people on the shore to see the small sail boats pass hither and thither with from one to three or four lines over the stern of the boats, and all engaged in drawing in the fish. Much more might be said in regard to the mackerel fishing of '85, but what has been introduced may give the landsman an idea of this industry at this point upon our coast, and of the sport it gives to the pleasure seeker.

One peculiarity of the mackerel school is that the fish move in a circle, which renders them a more easy prey to seiners.

STRIPED SEA BASS.

From the capes of Delaware—where it is known as the Rock-fish — to the farthest coast of Maine, the sea bass is an object of interest to piscators and epicures. nominally a sea fish, it has a home in the rivers, where, like the salmon, which it resembles, somewhat, in habits, it comes to spawn and is mostly captured there, but it is familiar to the Pool and is often caught by the fishermen. It is a voracious fish, with an ever active appetite, and objects to no form of bait, though the herring is its especial favorite. It will bite readily at the fly, is attracted by gaudy or brilliant colors, and a silver spoon or a metal squid often leads to its capture through its fatal want of discrimination. These fish attain a great size, and it requires firmness, strength and tact to take them, as they are next to the salmon for activity and power, and it requires an expert to land them handsomely. They must be held every instant in hand when on the line, to relax which for a moment is to give them an advantage that they will improve to free themselves from the hook. They are caught in rapid rivers and the swash along shallow shores, often by hook, thrown off from the shore, but more by trolling with the tide, or in a boat along outside the Frank Forrester, who takes the lazy Waltonish view of fishing, and favors dawdling more than working, don't take much to bass-fishing because it hurts the hands to wrestle with them, in the close hand-over-hand effort to pull them in; but the true sportsman delights in this, where the noble fish means business and struggles for its life, and does not surrender, an easy victim, to his captors. In color the striped sea bass is bluish brown above and silvery on the sides and beneath, with generally from seven to nine equi-distant parallel stripes, the upper series terminating at the base of the caudal, and the lower above the anal, fin. The body is cylindrical and tapering, the head and body covered with large adhesive scales, with a gluey exudation from the skin that renders it difficult to clean, if allowed to dry. The head is bluntly pointed, eyes large, nostrils double, quill-openings large, lower jaw the longer, teeth numerous on the maxillaries, palatine bone and tongue. It is one of the most beautiful fish of all our home varieties, and as an article of food it is delicious, the flesh being very firm, white and well flavored. The head is regarded as an especial delicacy by Cape Cod epicures.

It is said that striped bass have been caught weighing one hundred pounds, which recalls the incident where an immense weight had been claimed for a fish, when one listener brought his hand violently upon his knee, exclaiming: "What a whopper!" "Do you doubt my word, sir?" said the narrator, severely. "Oh, by no means," was the reply; "I meant what a whopper of a fish." But the hundred pound fish, though exceptional, may not have been impossi-They have been caught in the vicinity of the Pool weighing seventy pounds, and the Piscataqua river -- whose deep, cool, and rapid tide is a favorite resort for them has furnished many big fish for the market, and many fish stories nearly, if not quite, up to this standard. A friend of the writer was fishing in the eddy of that stream, when a bass leaped out of the water within a couple of rods of him, that, estimating it by the splash it made, must have approached to the heftiest claim, if not exceeding it. there is one story about the capture of a bass in the Piscataqua, that an old farmer residing on its banks used to tell, and which was true, of which he was the hero. the morning of a rainy day he was at the fish-market, in Portsmouth, and one of the fishermen gave him a bright new herring which he threw into his wagon and went In his stable, hanging up, was an old cod-line that home. had hung there for years since his purchase of the place, and how long before the memory of man knew not. the day was too bad for farming, he took down the line, with its rusty hook, and started for a ruined bridge that

crossed the stream to an island, that had formed one half of the public way, now discontinued, the other half entirely gone. A bare foot way was left over the crumbly planks, and stepping upon the ruin, he threw over his line baited with the new herring, and let it drift away with the rapid tide. He watched it as it disappeared in the distance, turning over and over, and gave himself up to the fisherman's hope, when something seized the bait with a show of great excitement. The water was lashed to a foam, and the line whizzed through his unaccustomed hands, burning them by its rapidity. Before it was all run out the speed slackened, and the farmer began to pull in, with great difficulty, - for the fish was a large one - at the same time moving along the shaky path towards the little island, leading his victim. He drew it close to the shore, till he could to its doom. see its magnitude, and then he wondered how he could secure his prey, as the distance from the old bridge to the shore below was some ten feet. He secured his line to the railing and then, climbing down, he went into the water and grappled with the monster fish, stunning it by a blow on the head with a stone and dragging it ashore, where it now lay at his mercy. He climbed back again and attempted to lift the fish with the line, but the line broke. Then, doubling the line several times, he wound it around the fish and succeeded in raising it to the bridge, from which he dragged it home in triumph. It was a beautiful deep sea striped bass, and weighed fifty-two pounds, which he sold to the very one who gave him the herring.

The bass are not disposed to cold and stormy weather, but when the winter comes they take to the estuaries of deep rivers, and imbed themselves in the mud, where they remain until spring, protected by the roots of water bushes, near the banks, thus avoiding the violence of the season. They spawn in the spring, and until far into the summer are very active near their spawning places. Where the rivers are deep and cool they are very plenty.

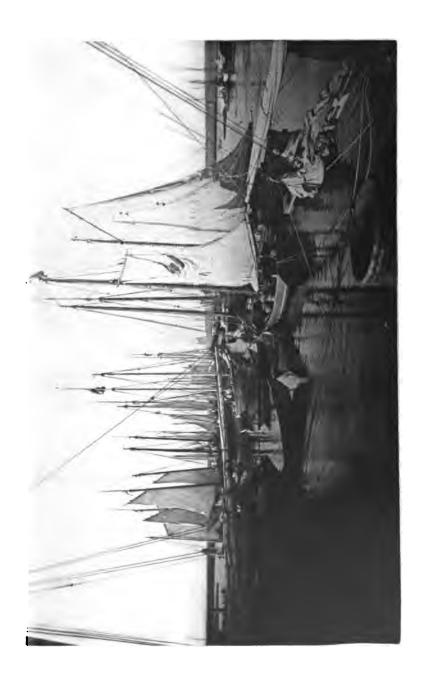
Though not enough are caught at the Pool to warrant its being called one of its industries, enough are taken to render it profitable, as bass always command a good price in the market.

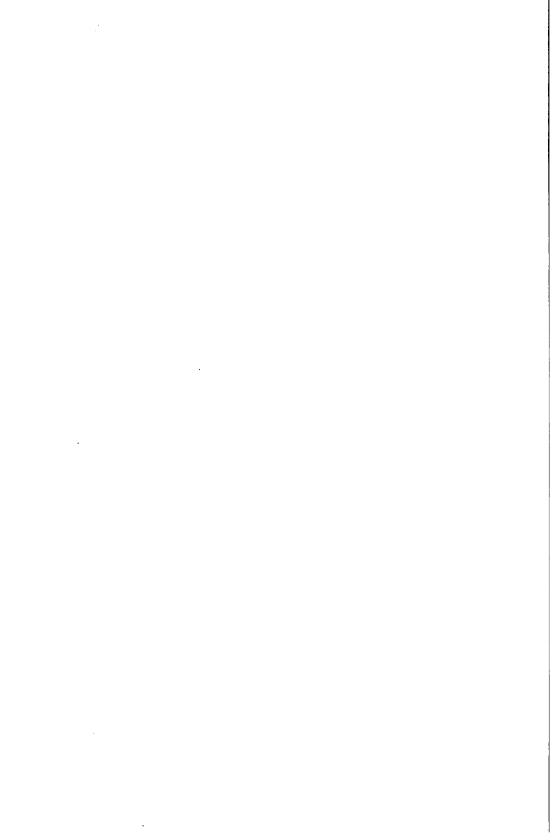
HERRING.

We strike a wide field, for "the name is legion," and we will not attempt to go very deep into this subject, lest we get beyond our depth; but will keep in shallow water, where we can touch bottom at any moment.

The herring is found in Europe, from Spitzbergen to the west coast of France, and is caught in large numbers on the coast of Scandinavia, Great Britain, Ireland, Holland and France. They do not ascend rivers, as the alewive and shad do.

The food of the herring appears to be, chiefly, minute crustacea and worms, and sometimes its own fry and other small fish. In all those places where herring are found in large quantities, and where people have become rich through these fisheries, the number caught has at times been exceedingly small, and for long periods the herring have disappeared entirely. This has not only been the case on the Scandinavian coast, but also on the coasts of Scotland, Ireland and France; and people have been reduced to want, in consequence of the failure of the fisheries. The absence of herring from these places on particular years, has not been accounted for, satisfactorily. Various reasons have been given, but no suppositions, however ingenious, can explain the periodicity of the great herring fisheries; for these fisheries have come to an end, not from lack of herring, but because the herring left those regions where they had been accustomed to come, and from what information we have been able to get on this subject, we have come to the conclusion that the number of herring has not decreased in the least, but the same power that creates, gives to these fish an instinct (?) to determine the temperature of the water





and air, and a proper time and place to bring forth their young, whether it be in those places formerly frequented by them, or in regions more remote.

Herring fishing has been carried on from time immemorial. That in American waters dates back to the days of the Pilgrim fathers. We have accounts of this fishery being prosecuted in Great Britain, in the eighth century; that of France, three hundred years later. The first record of herring being caught on the Scandinavian coast, dates back to the tenth century. It would be impossible, in this little sketch, to give the great extent to which this fishery has been carried on for the last eight or ten centuries. To show how important this branch of industry was to the people of the old countries, and the superstition that existed in regard to the absence of these fish from the coasts, on particular years, I will give from a law book that was issued in 1589, an extract, which reads thus:

"As all good gifts come from Almighty God and His Divine Majesty, thus our Kingdom of Norway has richly experienced His favors, its inhabitants, as well as others, having been blessed with successful herring fisheries. But since there is danger that God may withdraw His blessings, on account of the great sins and vices of the inhabitants of the coast, our tax-gatherers, each one in his district, shall see to it that people in the fishing stations lead good and Christain lives; that there is preaching every Sunday, and people are exhorted to lead a Godly life, so that God may be moved, by the prayers of good Christians, to extend His blessings to us, also, in the future."

An ancient writer has said that the herring is one of those natural productions, whose use has decided the destiny of nations. Caprice and luxury render valuable coffee, tea, spices and silks, but necessity demands the herring of the northern ocean.

That my readers may have some idea of the number caught in years past, I will state, that on the Swedish coast of the Baltic, 150,000 tons were taken in 1873. The product of the herring fisheries of Great Britain, in 1855, was 897,463 barrels. With these, and the enormous quantities caught on other European coasts, and on this side of the Atlantic, we can get some conception of the produc-

tiveness of this fishery. To carry on this business, thousands of vessels and boats, and more than two hundred thousand men, women and children are engaged.

The time for spawning is various, as we have the spring, summer, and fall herring. With regard to the nature of the spawning bottoms we generally find mentioned rocky or stony bottoms, sand bottoms, bottoms overgrown with algæ or other aquatic plants, whilst it is generally denied that herring can spawn on soft, muddy bottoms without any vegetation. Some authors assert, that herring spawn wherever they find suitable bottoms. Others, on the contrary, believe that the herring, by its instinct, chooses spawning places, which are not only suitable for hatching the eggs, but also for feeding and protecting the young fish. While it may be true that the herring prefers calm waters during spawning, and that rough waters and storms sometimes compel them to spawn some distance from the coast, yet I do know, from personal observation and experience, that herring will approach the coast and deposit their spawn within an eighth of a mile of the shore, and on the most exposed part of the coast, during the very severe gales of fall. I have known this to happen, when it was so rough and stormy that the fishermen could not get out to see their nets, and a great loss was occasioned thereby. fact, that before the spawning commences, the herring, that have lived rather scattered, begin to gather in very large masses, and approach the coast in many instances, in schools, half a mile in length. It has also been observed that when the herring approach the spawning places the majority are female, while, at the end of their visit, the male predominates.

The common herring of our waters visit different parts of the coast, from Cape Cod to Labrador, at various seasons of the year, for the purpose of spawning or feeding, and are abundant in some localities during a great part of the summer. In winter, herring are caught on the eastern

coast of Maine, Nova Scotia and Newfoundland. In former years, the spring herring fisheries of the Magdalen Islands drew a large fleet to that region, but, from some cause, herring are not found there at present in any great quantities.

At Labrador quite a business is done by catching herring in the fall months, and these are considered superior to any caught on this side of the Atlantic. The winter herring fisheries of the eastern coast of Maine, Nova Scotia and Newfoundland have been prosecuted with more or less success for a number of years. The fish caught at these places are frozen and shipped in bulk to Portland, Gloucester and Boston, and are used in large quantities by the winter fishermen, who depend entirely for a supply of fresh bait from this source. The bank fishermen, who start in early spring, are often compelled to go hundreds of miles out of their course to obtain bait. The spring herring of our coast make their appearance, in the vicinity of Cape Cod, about the first of May. From what point they come is as great a puzzle as it is to tell where the mackerel go when they leave our shores.

The arrival of herring, in spring, is awaited by the fishermen with great expectations; for a good school of cod-fish most generally follows, and the shore fishermen depend almost entirely on these little visitors for a catch of cod-fish during the months of May and June. The traffic in salt herring is very great. They are sold by the fishermen to buyers, who pack them in barrels, half and quarter barrels. They are shipped to every state in the Union, to the West Indies and other foreign ports. Quite an extensive business is done in smoking herring on the eastern coast of Maine and the British Provinces. Herring cured in this manner are packed in boxes and sent all over the world. There is a company at Eastport, Me., engaged in canning small herring in oil, that are an excellent substitute for imported sardines.

Herring fishing at biddeford Pool.—There is no place on the coast of Maine or Massachusetts where the fall herring fishing is prosecuted with so much success as at the above named locality. While other localities have generally failed to yield a profitable supply to the fishermen, the waters around Biddeford Pool have yielded in abundance. The herring "strike in" to that place, about the middle or last of September, for the purpose of spawning, and vessels, from almost every fishing port between Cape Cod and Eastport, go there to participate in this fishing.

It was my pleasure to re-visit the Pool in the fall of 1882, to indulge for a week in the sport of cod-fishing. This fishing is made doubly sure by the presence of herring, which are used for bait. Arriving at the Pool late in the evening, I was forcibly struck by the appearance of the harbor; for small, weird lights in every direction, seemed to be dancing upon the waves. On inquiry I learned that a fleet of herring fishermen was lying at anchor in the harbor, and the lights seen were on board these vessels. The reader may be sure that I was up betimes the next morning, for I was anxious to get a glimpse of these vessels, and I found the crews all busily engaged preparing for the "strike." Some were mending nets, others were hanging nets to cork-ropes and lead lines, and others were fixing buoys, etc. Taken altogether it was a very busy time with them. The herrings are caught by the use of gill-nets. These nets are, on an average, one hundred and tweny-five feet long by twelve feet deep, and each vessel uses upwards of twenty to obtain a catch of herring. More than one thousand men are employed, and nearly five hundred dories or small boats are brought into requisition, during the fall "strike" of these fish at the Pool. When there is the least sign (the fishermen go by signs sometimes) of an approach of herring to the coast, and the weather will permit, the fishermen take their nets

into the dories and row out, from a quarter of a mile to a mile from the shore, and set them. This is done, by the use of warps and small anchors or grapplings, which hold the nets in position, while to the nets buoys are attached, to keep them from sinking, and also to mark the spot where they are set.

During the first week of my re-visit to the Pool it was very stormy and rough, and I had no opportunity to indulge in the pleasure of cod-fishing, but I had a fine chance to watch the herring fishermen, as they came in from their nets with their silvery freight, and though the sea was rough, and the tide ran strong, yet they were quite successful. Many times the nets get so filled with herring that they sink, and it is almost impossible to raise them; and sometimes they are raised, when sunk, by the united efforts of a whole vessel's crew, and by the use of dories and tackle. But when raised in this manner, the nets are often torn and rendered useless. I was told, by a fisherman, that forty barrels of herring had been taken from a single net. Many nets are lost by sinking to the bottom and are never seen again; some get adrift during a storm, and are driven to sea by the force of the wind and tide, or are cast upon the shore unfit for use. One of the Pool fishermen had two new nets set and went in the morning to take them up, but when he got to the place where he had set them, the night before, he could not find While his neighbors all around him were busy loading their dories with fish, he could only look on and wonder "why this was thusly." It was supposed that some of the nets were stolen, but, with the exception of one or two cases, the men appeared to be honorable and square in their dealings, though it would be pretty strange not to find some dishonest ones among a crowd of over a thousand men of different nationalities.

Fish-buyers came from Portland, in large vessels, to buy fish of the fishermen who wished to sell them fresh; for in this way the fishermen can often realize more than they could to salt them. One thing was noticeable, that, when there was a big "strike," and the fishermen were bothered to get salt to save their fish, the price was sure to go down. A large number of bank fishermen came, from Gloucester and other places, to get bait, and they were enabled, without much delay, to get all they needed.

One of the Pool skippers, who had been rather unfortunate in obtaining a supply for bait, concluded to run down outside Wood Island and set his nets from the stern of his vessel. This he did, and in the morning, when the nets were hauled, they yielded thirty-five barrels of herring. Just as they had become secured, a bank-fisherman came in and anchored, when the skipper went on board and sold the night's catch for seventy dollars, thus realizing a good profit for a night's work.

The strike of herring at the Pool is a very short one. Many seasons it does not last more than two weeks, and I have been told that it has been much less, but, during the time of the strike, the Pool is one of the liveliest places on the coast. The fisherman is busy, for he believes in the old adage: "Make hay while the sun shines;" the store-keepers are active, for it is a time of harvest with them; the farmers find a ready sale for the products of their farms; the fish-buyers are on hand, ready to buy, and almost everyone belonging to the place is actively engaged for the time. During the day the fishermen are hard at work taking care of the fish, mending nets, or fixing gear, for there is no time that they cannot find something to do to forward the voyage.

I had a good chance to study the characteristics of these hardy, rough looking sons of the sea, and I will say that I found them intelligent, sociable and polite, and I was much pleased with their general character, for I believe they are men who are willing to do as they would be done by. I asked a "Pooler," what they did with so many herring;

"Oh, we trade 'em off, same as the boys do jackknives, first one gets 'em and then another," was the reply.

As the weather had not been suitable for cod-fishing, I concluded to stop a few days longer, for I was unwilling to go home until I had tried my luck once more in deep sea fishing; and I was well paid for waiting. The sun, that had been hidden for a number of days, had broken through the clouds, and the cold, drizzly September storm was over. Monday morning came and it found me up bright and early. Capt. Frank had everything prepared in good shape for a day's enjoyment out upon the deep, and just as the sun was rising from its ocean-bed, we cast off from our mooring and filled away, down among the fleet of herring catchers, and bank fishermen, that were at anchor in the harbor. As we glided out beyond where the fleet lay, my eyes rested upon a sight that I shall never forget. There before us in the space of half a mile square, were some three hundred dories and small boats, each boat containing two or three men, all busily engaged picking their nets, and as they rose and fell on the long waves, the bright, autumnal sun shining down upon them, it gave to the picture a coloring that no artist could put upon canvas.

After obtaining a supply of bait for our day's fishing, we continued on our course, passing dory after dory loaded to the water's edge with their silvery freight. With a fair breeze and flowing sail we shaped our course for "Tanto," hoping to be able to find a spot where we could have some good fishing. But as Burns has said,

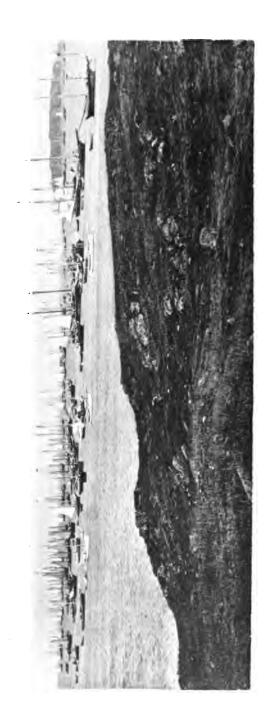
"The best-laid schemes o' mice an' men Gang aft agley."

So we found it in our case, for after a two hours' sail, which, however, I enjoyed very much, we anchored on "Tanto," but our great hopes of a good catch of fish were not realized. After using as much of our time as we thought prudent in trying for fish, we got under way and ran in on to the "Peak," where we found Capt. Wm. M.

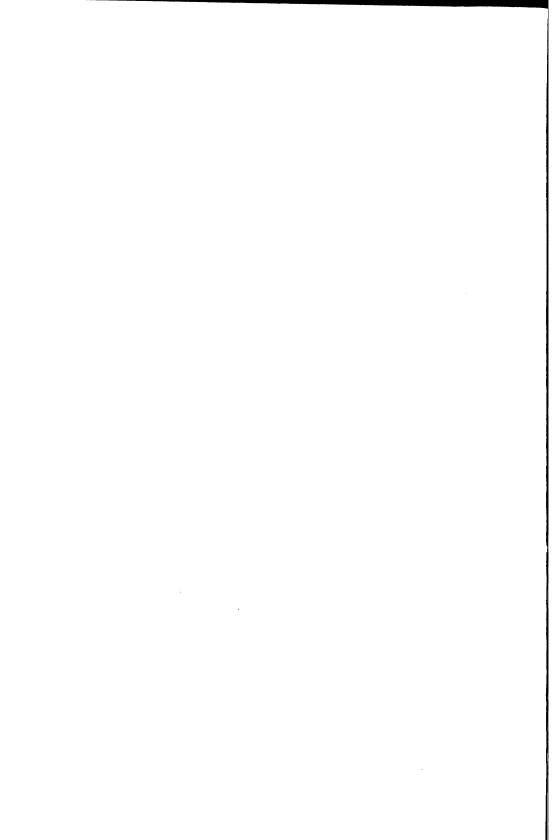
Hussey, who had been very successful in taking a good fare of cod and pollock. We anchored the Jennie B., but as it was getting late in the day, and the fish were scarce, we concluded to return to the Pool, and try our luck another time. But the day's recreation was not lost to me. The morning sail, out among the shipping and dory fleet, with all its varied scenes, the ocean breeze and glorious day; these, together with the fine sail we had on our return, well repaid me for all the time and trouble taken.

Tuesday morning we were up early for a new start to the fishing grounds, and, as we sailed down the harbor, nearly the same scenes met our gaze as on the previous morning. We got our supply of bait from the herring catchers, and lay our course for the "Peak," where we anchored, and had some very successful fishing. We returned to the Pool well satisfied with the day's sport, but determined to try it again on the morrow. Wednesday morning we were also up bright and early, and, as we cast loose from our mooring, and sailed out of the harbor, we noticed that a number of the fleet had got their fares and left for a market. We procured our supply of bait, but on inquiry, found that the herring were about leaving the coast.

We shaped our course for the fishing ground, anchored, and, after a great deal of pulling, hauling and baiting, secured upward of five hundred pounds of fine cod and other fish. We got up our anchor, but the wind was ahead, and very light, so we did not get in until after dark. That day's enjoyment wound up with one of the most interesting scenes that I ever witnessed. When we got into the mouth of the harbor it was very dark, and just as we were up with the ancored fleet, there came a very heavy squall from the north-east, which sent the Jennie B. "kiting" through the water. But Capt. Frank was equal to the emergency, and, taking the helm, the first order was, "Down foresail!" This was done as



THE HERRING FLEET IN OUTER HARBOR, BIDDEFORD POOL, MAINE.



quickly as said. All this time we were rapidly gaining on the forest of masts, and, for the life of me, I could see no opening through. Capt. Frank sent the best man forward to keep a good lookout and direct the course of our vessel. I stood by, watching with intense interest every move, and as we made our way among the thick shipping, the lookout forward sang out the orders which were repeated by the man at the helm, and, for fifteen or twenty minutes, it was: "Luff," "Keep off," "Steady," "Luff a little," "Hard up!" "Hard up!!" "Steady," "Keep off a little," "Hard down" and "Steady," until we got to our mooring safe from all danger. This was quite an experience with me, and it reminded me of my younger days, when I have seen the farmers hauling out wood, in winter, on an old logging sled, dodging around among the trees.

Thursday morning I was up looking at the great comet long before it was light. The wind was very slight, and the sun was well up before we got away. As we made our way out of the harbor, my attention was called to the fact, that the great number of vessels, which were at anchor in the harbor the night before, had very much decreased, and only a few were left riding upon the placid tide. We were fortunate in obtaining a supply of bait, but we learned from one of the fishermen that the herring strike was over.

It was nearly noon when we cast our anchor, but we had the satisfaction of knowing that we had cast it on the right spot, for at 4, P. M., we returned to the Pool with nearly a thousand pounds of fine cod and pollock. As my stay at the Pool had been prolonged much beyond the time I had anticipated, I concluded to take the late train for home. So bidding good bye to the Pool and all its pleasant associations, I took carriage to the depot, and arrived home at 9:15, P. M.

On the Saturday following I received a letter from Capt. Frank, saying, "We were out in the Jennie B. on Friday,

weather very moderate; anchored at 12, M.; returned to the Pool, at 5, P. M., with twelve hundred pounds of nice large pollock. Herring fleet all gone."

WHALE FISHING.

Although whale-fishing does not happen to be one of the industries of Biddeford Pool, and though the whale is not a fish, still the capturing of the monster holds relation to the taking of the finny tribe, though the means are different, the day being long since past when the giant went fishing, as we read, where

"His hook he baited with a dragon's tail, Sat on a rock and bobbed for whale."

Whale taking is included in all the histories of fisheries, and in Starbuck's "American Whale fishing" he combines all, claiming, as the promoters of civilization, the whalemen for pioneers, the explorers simply following where they have led. So we accept the term "fishing," instead of capturing the "monarch of the deep," if our own swordfish does not cross swords with him in disputing that title. More than mere commercial adventurers, the whalemen, as "fishermen," have ever been the missionaries of civilization, and their vessels have always led science in discovery, thrusting their prows into unknown seas and challenging the world to follow. The story is told of two Russian ships that discovered a group of islands in the Antarctic Ocean, and were about flying the Russian flag above them, to secure their right, when a new discovery was made, that a little sealing sloop from Connecticut was at anchor between the ships and shore, that cut off their claim to priority. It was on board of a whaler that the American flag was first unfurled in an English port, and another whaler, by the same token, made South America acquainted with her republican neighbor.

Contemporary with the settlement of New York and Massachusetts, the whale fisheries have had existence, now

diminished by the intervention of other articles than oil for lubrication and light, and by the decimation of the whales - and they furnished, besides, for our war-marine, a body of men of the most sterling worth, to man our ships and maintain the dignity of the flag that they first advanced. The whale fisheries led until a recent date, comparatively, but now the cod fisheries are in advance. When the country was first settled whales abounded on our coast, and early writers describe the "taking ways" the Indians had in capturing them. One way was to harrass them to death by following them in canoes - probably surrounding them - and piercing them with wooden or bone harpoons, with ropes attached, made of the bark of trees, and tied to a log, or shooting them to death with arrows. They made a great time of it when they caught one, the chiefs equally dividing the flesh among their several tribes, which was hung up to dry, the fat saved to eat with peas and other vegetables. In the early days of the country the whale was equally a power on land as in the water, for he often furnished a bone of contention, and his fat gave impetus to the wheels of legislation.

The whale was then a migratory animal, with regular months for coming and going, but now he comes as a stray wanderer at any time, and is rarely caught, save, perhaps, by Cape Cod or Nantucket people. One, many years ago, came up the Piscataqua river, at Portsmouth, and passed beneath the bridge, three or four miles from the sea. It probably went up in the night, as it shied the bridge in the morning, and remained above for a week, affording rare sport to the people, all of whom were out to kill it. It was caught at last by running itself on a shoal, and gave up its life after a desperate struggle.

The perils and vicissitudes of a whaleman's life are many, and the whalemen's profits have been sadly disproportionate with the risk to secure them. Yet the small amounts that we see accredited to them in the far past

were very respectable in the day of small things, when inordinate wealth was not known nor desired. Hence the few thousand dollars per year were enough to satisfy companies and continue the fisheries, until a more extended business increased the price of oil and bone and swelled the profits accordingly. The business was precarious, and long cruises were often made with discouraging results, and short ones with prolific success. Mr. Starbuck gives many instances of profitable voyages, but they were above the average. One he cites as the most extraordinary voyage ever made, viz., the ship Envoy, of New Bedford, which was condemned to be broken up in 1847, but was patched up for service in '48, and sent on a whaling voyage, uninsured — the underwriters refusing to take risk in her. She was sold, after her cruise, at San Francisco for \$5,000, which, added to the value of cargo sold and sent home, increased the amount to \$138,450. Though an old whaler may be condemned, it is no proof of her unseaworthiness, unless half eaten by sea worms, for the oil has a preservative power, and there is no tighter vessel on the wave, and scarcely anything but a lee-shore can affect her.

Rare anecdotes are told of whaling adventures and great daring in the capture of whales, and facts, far ahead of romance, work the effect of romance in their perusal. The staving of boats by whales in their "flurry," the loss of life, the incarceration of whale ships in the ice, the struggle to secure the whale when harpooned, are recitals that almost curdle the blood of the timid. Of those who have written the most and best about the whale fisheries, William H. Marcy, of Nantucket, stands at the head. He has embodied his experiences recently, in a volume that graphically details the adventure, peril and success of the business, entitled "Up North in the Gorgon," which is thrilling to read. Taking the sperm whale is an exploit that affords the most exultation to a whaleman, although the right whale yields about as much oil, and the lining of its jaw,

or bone, which, devoted to many purposes, is about as valuable a commodity in the market as the oil. The bones of the bow-head have been taken out, measuring seventeen feet. The author of "The Nimrod of the Sea," a book on whaling, presents a familiar description of the head of a right whale, with bones like the largest of those named. He leaves the imagination to grasp the size of this whale from the dimensions of the head, as measured by objects familiar to the mind, first stating that "the blubber, or blanket, of such a whale would carpet a room 22 yards long and 9 yards wide, averaging half a yard in thickness." Of the bone: "set up a saw-log, 2 feet in diameter and 20 feet in length for the ridge-pole of the room we propose to build; then raise it in the air 15 feet, and support it with pieces of timber 17 feet long, spread say, o feet. This will make a room o feet wide at the bottom, 2 feet wide at the peak, and 20 feet long, and will convey an idea of the upper jaw, the saw-logs and slanting support, representing the bone. These walls of bone are clasped by the white blubbery lips, which at the bottom are 4 feet thick, tapering to a blunt edge, where they fit into a rebate sunk in the upper jaw. The throat is 4 feet thick, and is mainly blubber, interpenetrated by fibrous muscular flesh. The lips and throat of a 250 barrel whale should yield 60 barrels of oil, and, with the supporting jaw-bones, will weigh as much as 25 oxen of 1000 pounds each. Attached to the throat by a broad base is the enormous tongue, the size of which can better be conceived by the fact that 25 barrels of oil have been taken from one. The right whale has an eye scarcely larger than a cow's, and an ear that would scarcely admit a knitting-needle." The spread of the lips of such a whale, as with open mouth it ploughs the sea for food, is about 30 feet, its tail about 25 feet broad, 6 feet thick, the point of junction with the body some 4 feet in diameter, and the vertebra about 15 inches. "Through the greater blood vessels, more than

a foot in diameter, surges, at each pulsation of the heart, (as large as a hogshead), a torrent of barrels of blood heated to 104 degrees. The respiratory canal is over 12 inches in diameter.

These enormous bones of the right whale, with their fringed edges, serve to supply it with food, such as small fish that swim on the surface, for, unlike its relative, the sperm whale, it has a small swallow, and it takes its rations with open mouth, that is closed when full, and then travels till satisfied. The sperm whale is provided with monstrous jaws armed with fearful teeth, with which it even crunches a boat now and then, and feeds principally on the immense squids to be found in the distant seas. "Nimrod of the Sea" says, that in the agonies of the "flurry" it often throws up immense pieces of undigested food, sometimes half as large as a whale boat, and, in one instance, fragments of a shark several feet long. This shows his capacity as a feeder, and that, like the anaconda, as described by the showman, he takes his victuals whole.

One habit of the sperm whale, is his abilty to sink instantly, like lead, when struck or when alarmed. Without moving either way, or by a perceptible motion of fluke or tail, he will disappear before the harpoon, that has been hurled, reaches him, to the mortification of the whaleman, an adept in the use of the instrument, who draws in his ineffectual line with a sense of shame, that nature should thus get ahead of him. Naturalists fail to explain the secret of this phenomenon. Resort for whale capture is now had to the bomb-lance, which, following the harpoon, is more effectual than the old hand-lance. This, however, is at times not very speedy in effecting the capture, as one case is recorded where 31 bomb-lances were fired into a whale before he succumbed to his fate.

The whale, as has been said, is a migratory animal, though its return to our shores is very rare. Along the Pacific coast it abounds at regular seasons, and the Bay of

Monterey is a favorite resort for whales. There are several Portuguese whaling stations there that do considerable business, though not so extensive as formerly. The shore of the Bay, nearest the town, is lined with the skeletons of whales, that have drifted in after the whalemen have stripped them of their blubber; the vertebra is taken by citizens to pave the walks of gardens or the yards of dwellings. With regard to its migration, evidence is shown that it has discovered a northwest passage beneath the ice, for whales harpooned in the Arctic Ocean have been found with the irons remaining in them at the opposite side of the pole, undoubtedly without jumping over it.

The small fin-back whale, or black-fish, is the only one that dares to put in an appearance here, and sometimes quite a number sport in our deeper waters, at once, to the delight of those out on summer cruises. They are not troubled much except by fishermen at Cape Cod or Nantucket, who maintain old habits by pursuing them. It is small game, however. Every summer these smaller whales are seen off the Pool, provoking a desire to take one, as is shown in the poem by Mr. Pearson, in this volume, describing the search for one on the E. Lawson, Capt. Goldthwait, which resulted, as all efforts do, in disappointment. The whale, as described by the father, when asked by his offspring regarding one, is a big thing.

A graphic account of the taking of a "right whale" is given in a novel, now out of print, called "Miriam Coffin, or The Whale Fisherman," which I reduce to readable dimensions. Capt. Seth Macy, of the ship Grampus, on a whaling cruise, was lying impatiently at anchor in Walwich Bay, on the western coast of Africa, in company with ships of other nationalities bent on the same errand. This bay, during certain seasons, is resorted to by the "right whale" for food, consisting principally of peculiar kinds of small fish that keep in shoal water about the bay and herd or school together in countless numbers. These are sucked

in by the whale through the vertical bars of whalebone that stud its mouth like the gratings of a prison window, or the palings of a picket fence. It was not the season for the whales' appearing, and Capt. Seth was eager for work. He had stationed a man at the mast head to look out for whales, and was walking his quarter deck impatiently, when the man aloft shouted "Flooks-flooks!" to the great delight of Capt. Seth, and all his men, who left their breakfast unfinished and rushed for their respective boats, four of which were lowered from the Grampus, and imitated by the crews of other vessels, that had caught the alarm. Soon the bay was covered with boats in pursuit of the animal, which showed no particular alarm a half mile away. The whale is not a vicious animal, unless wounded; and, if not frightened, will move off sluggishly from his pursuers, and appear and disappear at regular intervals, so that, if the direction is well observed when he sinks (or shows his "flooks," or forked tail, as he dives), a pretty accurate calculation may be formed as to the place of his reappearance. An attempt was made to head him off, but he deviated from customary practice and headed for the open sea, throwing the boats into confusion. Capt. Macy manned his boat with the first pick of the men—the captain's prerogative — and it was matter to him of deep regret to have the whale escape him by changing his course. The animal, however, was in no hurry to leave, but cruised around the anchorage of the ships, taking in his food, apparently indifferent to the hostile demonstrations that were making. At last, gorged with his meal, he commenced in earnest his retreat from the bay, the boats' crews making a new effort to head him off, which was unsuccessful. He vanished from sight, and then a race ensued in the direction that he was supposed to have taken. He came up to breathe, at last, a mile ahead of the foremost boats, Capt. Seth's boat being somewhat behind. This resulted from a disposition to wait until the whale

should have got clear of the bay, and the strength of his crew was little impaired by efforts thus far. At the appearance of the whale on the broad sea, he rallied his men for pursuit, and when the animal appeared again it was but half a mile distant. Now came the contest between Capt. Seth and three rivals—a Spaniard, a Dutchman and an Englishman. He held the steering oar in his left hand, and placed his right foot against the after oar just below the hand of the oarsman. This gave added power to the oar, and soon two of his contestants were passed. The Englishman was the last, who imitated the trick of the foot upon the oar, but broke the propeller in the rowlocks, and the Nantucket skipper passed on to his triumph.

"Way enough—peak your oars!" said Seth to his men. The oars bristled apeak, after the fashion of the whale fishermen. The harpooner immediately seized and balanced his weapon over his head, and planted himself firmly in the bow of the boat. At that instant the huge body of the whale rose above the surface, and Seth, with a single turn of his steering oar, brought the bow dead upon the monster, a few feet back of the fin. Simultaneously with the striking of the boat, the well-poised harpoon was launched deep into the flesh of the animal.

"'Starn all!' shouted Seth.

"The boat was backed off in an instant, and the whale, feeling the sting of the barb, darted off like the wind. The well-coiled line flew through the groove of the bowpost with incomparable swiftness, and it presently began to smoke, and then to blaze, with the rapidity of friction. Seth now took the bow with his lance, exchanging places with the harpooner, and quietly poured water upon the smoking groove until it was cooled. The oars were again peaked, and the handles inserted in brackets fixed on the ceiling of the boat beneath the thwarts—the blades projecting over the water like wings, and the men, immovable, rested from their long and successful pull. And much

need did they have of the relief, for a more arduous or better contested chase they had never experienced.

"The line in the tub was now well nigh run out, and the boatsteerer, with a thick buckskin mitten, or nipper, as it is called, for the protection of his hand, siezed hold of the line, and, in a twinkling, caught a turn around a loggerhead, to enable the man at the tub oar to bend on another line. The rapidity of the animal's flight, the while, The boat now ploughed deeply and was inconceivable. laboriously, leaving banks of water on each side, as she parted the wave, 'that overtopped the men's heads, and effectually obscured the sight of every object on the sur-The swell of the closing water came after them in a heavy and angry rush. The second line was now allowed to run from the loggerhead, and a drag, or plank, about eighteen inches square, with a line proceeding from each corner and meeting at a point, like a pyramid, was fastened to it and thrown over to deaden the speed of the whale. Another and another drag was added, until the animal, feeling the strong backward pull, began to relax his efforts, and, presently, he suddenly descended, though not to the full extent of the slackened line.

"It now became necessary to haul in the slack of the line, and to coil it away in the tub carefully, while the men pulled with their oars to come up to the whale when he should rise to the surface. All things were soon ready again for the deadly attack. The ripple of the whale, as he ascended, was carefully marked, and when he again saw the light of day, a deep wound, close to the barbed harpoon, was instantly inflicted by the sharp lance of Seth. It was the death blow.

"'Starn all!' was the cry once more, and the boat was again quickly backed off by the oarsmen.

"The infuriated animal reared in agony, and lashed the ocean into foam. The blood gushed from his spout-holes, falling in torrents upon the men in the boat and coloring

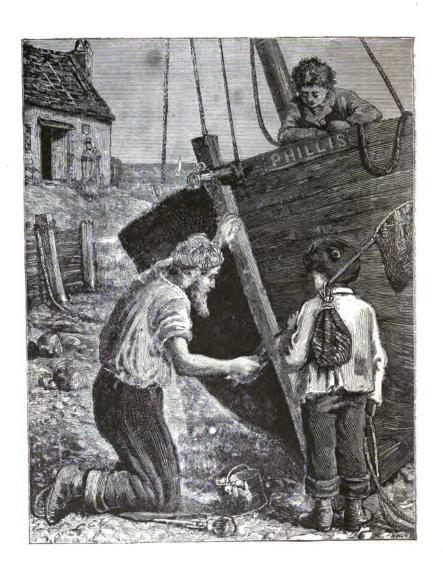
the sea. The whale in his last agony is a fearful creature. He rose perpendicularly in the water, head downwards, and again writhed and lashed the sea with such force that the people in the distant boats, though miles away, heard the sound distinctly. The exertion was too violent to last long: it was the signal of his dissolution. His life-blood ceased to flow, and he turned his belly to the sun! The boat of the Grampus floated triumphantly above the body of the slaughtered leviathan, and the peril of the hardy crew was over."

CATCHING WHALES.—A Detroit whaler communicates to the reporter of the *Free Press* the following mode of taking the monsters of the deep—not Lake Michigan—and it comes in timely as an episode:

- "No, sir 'tain't no fun, whale fishin' ain't, you can betcher life on that."
- "Tell me something about it."
- "What 'ud be the use! You wouldn't understand. You'd put it in the paper so chuck full of mistakes it 'ud make a whale fisher sick to read it. But then I dunno. Most people ain't whale fishers and most whale fishers can't read. So it wouldn't matter, would it, cap'n?"
 - "I don't know that it would, but I'll try to get it straight."
- "Well then, you see we don't ship like most sailors, we goes on lays you see."
 - "No, I don't. What 's lays?"
- "There you go. I knew that 'ud be the way. Why, any fool knows what on a lay means."
 - "I know one fool who doesn't."
- "Well, a lay means a share. A green hand gets 180th, and an A. B. gets 160th, see?"
 - "What's an A. B. and the 160th of what?"
- "Well, if you ain't the worst! Why, an able seaman gets the 160th. Of what, eh? Why of the catch, to be sure. What'd you think? Of the ship? Well, I shipped on the Sea Breeze at San Francisco, able seaman. She's running yet—that bark is, and the cap'n 'n' mate's first rate fellows—put that in, will you? I was the mate's right hand man. I was his bo' striker."
 - "What's a bow striker?"
- "I didn't say bow striker; I said boat striker, b-o-t-e, boat. Don't you understand English? Why a boat striker is—pshaw, you make me tired. Well, we laid our course for the Sandwich Islands an'——."
 - "The Sandwich Islands?"
 - "Yes, the Sandwich Islands. Didn't you hear me say so? What's the

- matter with you? I suppose you wouldn't a gone by the Sandwich Islands."
 - "Well, it strikes me as rather a roundabout way to get to the Arctic Ocean."
- "Oh, does it? You'd make a healthy sea captain, you would. I'd like to be on a lay with you."
- "Let's get on with the lay we're at. What did you go to the Sandwich Islands for?"
 - "What for? What does any of 'em go for?"
 - "Give it up."
- "Well, they goes for sperm oil. They gets the rigging set, a-going there, and they provisions up at the Sandwich Islands to help out the salt horse and hard tack."
 - "And is the sperm oil you get in the tropics as good as that in the Arctic?"
- "Now you've got it. I see you've got the hang of the whole thing. Sperm oil in the Arctic. Oh, Lord! You're a bright 'un. Sperm oil? Well, if that don't— Now I suppose it wouldn't supprise you to see a sperm whale in the Detroit river, or, ma'be, a walking up Wood'ard avenue? Oh, it would, eh? Well, it 'ud supprise me just as much to see a sperm whale up North—so it would any sensible man. Why, sperm whales is Tropic whales. North we get the bowhead."
 - "The bowhead, eh?"
- "Certainly. There's a great difference in them whales. The sperm's a cuss—you can't depend on him. No, sir. His oil's worth a dollar a barrel, and he knows it and puts on style. The bowhead's only worth fifty cents a barrel, and so he's meeker like. You can depend on a bowhead. You can't on a sperm. The bowhead's got certain feeding grounds, and there you find him at certain seasons of the year. In the fall they go south. In the spring they go north. You see, they have certain feeding grounds, and all you have to do is to go to their feeding grounds at the right time and there's your bowhead. The bowhead lives on insects, and he—"
 - "On insects?"
 - "Oh, that's set you off, has it? I said on insects, didn't I?"
 - "Does your bowhead jump out like a lake fish and catch his insect?"
- "Now, you can't come any of your smart Aleck business on me. If you know more about whales than I do—then good-by."
- "No, but I didn't know they lived on insects, and I wanted to find out how they caught 'em, that's all."
- "The insects are in the water. Look like fine meal—all little white nubs. When the man on the fore crosstrees sees a whale he sings out, "There she blows." The officer on deck cries, "Where away?" And the man aloft he sings, 'Six points off the lee bow."
 - "Suppose it is six and a half or seven?"
- "I'm tellin' this. So we clears away the boats—larboard boat first—that's the first mate's, then the second mate's and then the third. Some of the steam whalers have seven mates. The Sea Breeze had four. There's six men—the mate, four oarsmen and the boat-steerer—in each boat, with two irons"—
 - "The boat-steerer steers the boat, of course?"

- "Of course he don't. The mate steers the boat."
- "Well, what is the boat-steerer?"
- "The boat-steerer stands in the bow and irons the whale."
- "Ironing the whale takes all the starch out of it, I suppose."
- "Right you are. You'd call irons harpoons, I suppose, all landsmen do. We try to sail on the whale if the wind holds and sometimes we run right on it. Then we lets go the halliards and the sail; unsteps the mast and runs it under the thwarts out o' the way; and he irons the whale abaft the fluke."
 - "What's the fluke?"
- "Why, the tail, of course; what else? Then the mate takes the bomb-gun and fires into the whale. If the bombs strike the lungs or a vital spot it's all day with that fellow. I've seen it take a dozen bombs to kill a whale."
 - "I thought they shot the harpoon now-a-days."
- "Some does and some don't. With Fletcher's improved gun they can shoot an iron into a whale ten fathoms off in still weather, but with the boat a-bobbin' up and down you can't do much with a gun at that distance. Two or three fathoms with the old-fashioned iron and a good boat steerer's better than them new-fangled things."
 - "Ever get wrecked?"
- "Got upset once and stove in twice. When a whale's struck she makes for an ice field. One got us in a lake among the ice and took to millin'."
 - "What's that?"
- "Turnin' round, of course. How else could a whale mill? Then she hoists her fluke clear over us, and blow me if she didn't smash the opposite gun'nel!"
 - "Did you get thrown out?"
- "Oh, course not! Course we went right along with the starboard gun'nel a-stove in! Lord, yes! Now, what'ud you a done?"
 - "I'd got out and walked."
- "Oh, I dassay. Well, we didn't. We didn't have no regetta arterwards, neither. We was all in the drink in a jiffy, and the second mate's boat picked us up."
 - "What do you do with the whale when it's dead?"
- "We wreathe a strap through the fluke and wreathe the eighty-fathom line through the strap and tow her to the ship. There's a 300-fathom line in the tub, that line's on the iron, then an eighty-fathom line in the midship thwart. First one lip is hoisted aboard, then the tongue, then the other lip, and put in the blubber room 'tween decks. Then they cut the blanket pieces with cutting spades—five inches wide, of sharp steel, with twelve-foot handles. When we'gets two or three whales aboard we lays to or anchors and tries out the oil."
- "How long were you out, and how many whales did you get on that voyage?"
- "We were out eleven months and got seventeen whales. My lay was \$220. A hundred-barrel whale's a good one. And say—you put in, that the Sea Breeze was the last ship as saw the Jeannette. No, sir; 'taint no fun whale fishin', you bet."



YACHTING AND BATHING.

THE perils of the sea are descanted upon by landsmen, who watch our yachts and smaller craft as they glide over the waves, subject to sudden storms and vicissitudes of the deep, but seldom to experienced boatmen, especially those at the Pool, do serious accidents occur, or anything, indeed, beyond the mere carrying away of some part of the rigging, or meeting with some trifling disaster that may be easily Almost all the casualties that occur proceed remedied. from inexperience, and it should be an object of especial care, with those who let boats, to know that those to whom they entrust their property are competent to take care of But a few years since, a sail-boat, containing three young men, was capsized at the mouth of the Piscataqua, by a sudden squall, and one of the three drowned. were rescued and the boat was allowed to drift away; when recovered it was found that eight turns of the sheet had been made around the cleat at the stern. The melancholy fate of the crew of the yacht Mystery, from New Haven for Nantucket, wrecked in Buzzard's Bay, probably proceeded from the same cause. She was manned by four young men, embarked on a pleasant summer trip, who were never heard of, their fate left to conjecture, the wreck of their vessel being found in the Bay. Such instances as these illustrate the necessity of caution. No boat should be

allowed to go out upon the sea without assurance being given of competency to man her. An excellent life-long Pool pilot thus gravely discourses:

"It is lamentable, but nevertheless true, that scores of yachts which cruise along our coasts during the summer season are not properly manned; or, as an old salt looks at it, manned by a crew that really don't know when to take in sail, when to make sail, or what to do in an emergency, when good judgment is needed. This may seem strange to many who are but little acquainted with boats and boat-sailing, but the only strange thing there is about it is, to the man of experience, that there are no more lost than is reported. Accidents will happen to the best of men and managers, and sometimes it even seems that the ignorant steer clear, when those who are fully posted run into danger. But this is not so, and the record will show that nine-tenths of the accidents that happen to the yachting and boating fleets, result from inexperienced management. No vessel or boat, from the size of the Great Eastern to the smallest craft that floats, should ever start on a voyage, be it ever so long or short, without being in charge of some one who is, in every respect, competent for his position.

"But while speaking of the danger that attends the unskillful boatman, attention may be called to the danger that surf-bathers incur when they undertake to brave old Ocean, for however hard the beach, and however well assured bathers may be that there is no danger lurking near, still the sea is an insidious worker, and the fearful undertow, on what are considered the safest beaches, may be doing its treacherous work underneath. Take any beach you please, and you will find it at one time so hard that the iron shoe of a horse will barely indent its surface; at another time it will be found gullied out, with the sand removed, in wide streaks for the entire length, with perhaps here and there little ledges of rock peeping above the

surface, plainly indicating that the undertow has been there; even though at another tide the smooth sand may be restored and the ledges covered. If that unfortunate party at Wells Beach, who went to their death, had but known the danger they were to meet, or had listened to the counsel of one who advised them, a terrible affliction would have been averted.

"'Oh mother!' said a lovely young lady, a few years ago, as she stood amid a group of bathers, 'do let me go in just once more,' for the breakers looked very fascinating as they broke upon the shore and she could not resist the temptation. She went in and in less than ten minutes was taken out a corpse.

"A young man, full of life, strong physically, and a fine swimmer, plunged into the wave, to encounter the undertow, that caught him and swept him out beyond any help from the shore. Strong men in a boat barely rescued him from his perilous situation just as he was sinking, exhausted, beneath the sea.

"Every summer what multitudes of these cases we see reported—distressing cases of bathers swallowed up by the sea in the presence of loving friends, powerless to aid them. In many places great precautions for safety are taken, by providing life-lines and skillful boatmen to protect the bathers; but yet, maugre all precautions, many are drowned through their own recklessness in going into the surf at moments when aid is not at hand."

The sea philosopher thus concludes:

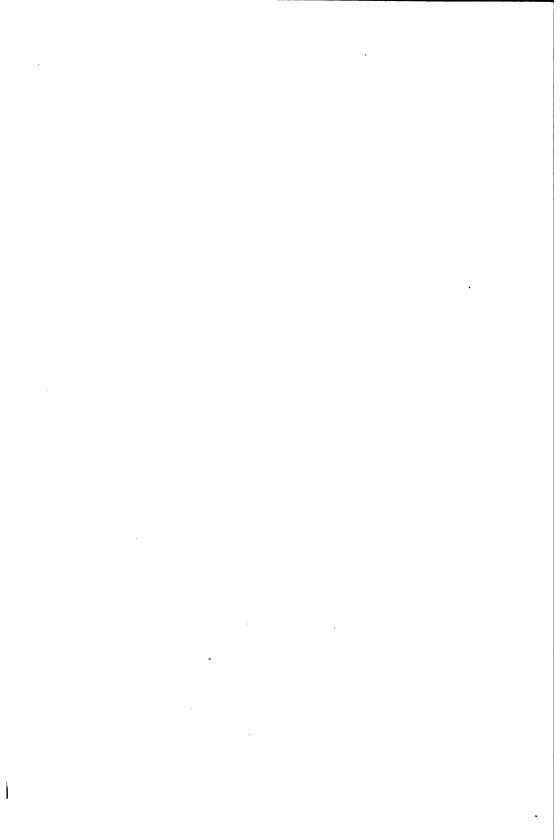
"I would like to ask if there is any more virtue in surfbathing than there is in still-water bathing? If there is not, then why not keep in smooth water? Should the bather feel that he or she *must* have a plunge in the foamy brine, then let the subject take some one along, who is well acquainted with the shore and the whirl of the tides, to point out the dangerous places. It seems to me, that any one, or any number, embarking on vessel, yacht, or boat, for a voyage along the coast, without having a skillful boatman and pilot on board, or any that attempt surf-bathing without first taking advice from those who know its danger, are just as foolhardy as was Capt. Webb, when he attempted to brave the whirlpool of Niagara, knowing that it was almost sure death to make the plunge."

H. C. Folkard, of London, the best of authority in nautical matters, published a treatise in 1870, upon English and foreign boats and yachts, touching every point relating to building and sailing. He gives some directions regarding the management of sailing-boats in squalls, that may be of practical value:

"On a wide expanse of water," he says, "signs of a squall may generally be seen on the surface some few moments before it reaches and strikes the sails of the boat; and at sea a squall may sometimes be seen at a distance of many miles; in which case there is plenty of time for shortening sail before its effects are felt. But in narrow rivers, and when sailing close under the land, squalls often come down upon the boat with all the suddenness imaginable. Such are the most dangerous of all squalls, and it is, besides, difficult to suggest a means of avoiding their dangerous effects on an open boat; except that double caution should be taken that the main-sheet is always ready to be let go in an instant, whenever you are sailing along the coast; for squalls come sometimes sweeping down the valleys with great force, and often catch the boats in a calm, as it emerges from the shelter of some high cliff or mound, and many and sad are the accidents that have arisen from such squalls.

"When sailing in an open boat, if a heavy squall is observed approaching, the peak of the mainsail should be lowered, or the sail brailed up. If only a light or little squall, allow it to just strike the sails, then lift the boat up to it, but not so as to lose all way: keep the boat going, or she will not answer to the helm. If a very

BIDDEFORD POOL AND OUTER BEACH.



heavy squall, the sprit should be taken out and the foresheet slacked. When threatened with a white squall, it is safest to let the fore-sail run down and to drop the peak of the main-sail; also to take in the jib if it be a large one. In an ordinary squall, if the sails be reefed and the boat a safe and powerful one, there is nothing to fear under judicious management. The boat may be conducted through it in safety by sailing her narrow; i. e., so close to the wind that the fore-leeches of the sails just begin to shake; but great caution is necessary, lest the sails be taken aback. In all cases of heavy squalls and strong winds, it is of the highest importance to keep good way on the boat, for if the boat lose way, or is stationary, the squall will tell upon it with double force and treble danger to that to which it would be liable if moving rapidly ahead. If a squall should strike the sails whilst the boat is running free, the helm should be put down; and this is a very important precaution to take in such cases, for if a mistake be made and the helm put up, the squall will most likely capsize the boat."

The author then treats of the causes of boats capsizing, agreeing with our own sea philosopher from whom we have quoted:

"Notwithstanding the numerous and melancholy accidents that occur, year after year, through the mismanagement and upsetting of sailing boats, there are persons who will not take warning therefrom, but persist in rushing headlong into danger which, with ordinary prudence, they might certainly avoid. The casualties that occur are not always occasioned by stress of weather, but are mainly attributable to causes within control. Boats are not so frequently capsized on account of large sails, strong winds, and heavy seas, as they are from mismanagement and carelessness—by far the greater portion of accidents occurring in fine or moderate weather. Among the principal causes of boats capsizing are: inattention to the main and jib

sheets; wrong adjustment of the sails, particularly the head-sails, or those before the mast; large and disproportionate spars; improper trim of hull, whereby the boat carries a lee-helm instead of a weather-helm; missing stays; sluggishness on coming about; insufficient ballast; the ballast shifting and rolling over to leeward; the jambing of a rope, whereby it is checked in running through the blocks or sheaves; the sail not coming down freely; ill-fitting blocks; reckless pressure of sail; overcrowding the boat with people; intoxication; standing up in the boat; leaning over the gunwale," &c.

The author proceeds, inculcating the greatest care regarding the coiling of ropes and keeping the halliards free, especially the several sheets on which all the safety of the craft depends. "In moderate weather," he says, "or during a steady breeze, with a clear sky, and when not likely to be squally, seamen and boatmen are frequently inclined to take what is called a 'slippery hitch' in the sheet: this is done by twisting the bight of the rope round its own part. A careful sailor, however, will never, under any circumstances, allow the main sheet to be belayed: he either holds or orders the slack to be held in hand."

This counsel, from an English view of things, may have room for application here where the same perils exist. At any rate it harmonizes with our exhortation to caution, and it matters not whether this is secured by English or Yankee means.



ROMANCE OF THE POOL.

THERE are many incidents, legends, and traditions told at Biddeford Pool, some of which have found their way into print, and, as Hamlet says, "more remains behind." The following, by Major Pearson, whose name is mentioned in the succeeding paper, tells its own story:

A LEGEND OF SACO BAY.

Off Wood Island Light, at the entrance to Saco Bay, coast of Maine, is a lone, foam-covered rock, known to sailormen as "Washburn" or "The Washerman." It is believed that in old times, while Neptune yet ruled the sea, this rock was the abode of a mermaid.

With this rock and its romantic tradition for the subject, the ensuing lines were written to amuse a friend, while sojourning at that Paradise of watering places, Biddeford Pool, Maine.

A. W. PEARSON.

Fair lady, I'll tell you a story in rhyme,
A story of love it of course will be;
A tale of what happened in olden time,
Mid the beautiful scenes of our eastern clime,
By the shore of its restless sea.

Strange, strange is the story, and yet it is true; Improbable still as it all may seem; For I dreamed it last night, and while dreaming I knew That since t'was a dream it was sure to be true, For there's nothing so true as a dream.

'Twas a dream of the reef at the mouth of the bay, Where the waves as they burst ever whiten in foam: 'Tis the Washerman rock, and our sailor boys say That once, in the long ago time far away, 'Twas a beautiful mermaiden's home.

And sometimes when sailing belated at night,
The siren was seen by the sailor boy there,
Where the spray dashes high and the breakers are white,
Sitting perched on the rock in the moon's misty light,
Sweetly singing while combing her hair.

Beneath this lone rock was her fairy-built cell, Far down, where the light of the sun never came; It was garnished with sea-weed, and inlaid with shell, And 'twas lit by a phosphorus flame.

Its ceiling was crystal, around on the wall Thickly studded were rubies and diamonds rare; But purer than crystal, and brighter than all Of the jewels adorning her glittering hall, Was the mermaiden languishing there.

Lonely and sad she reclined in her cave, Encircled by splendor and wealth untold, And mused by the light of the gleaming wave, As it sparkled o'er sands of gold.

"Ah! why, alone in the dreary sea
Am I, in my beauty condemned to dwell?
Is there no one on earth my adorer to be;
To rest in my arms while he whispers to me,
The tale of his true love to tell?"

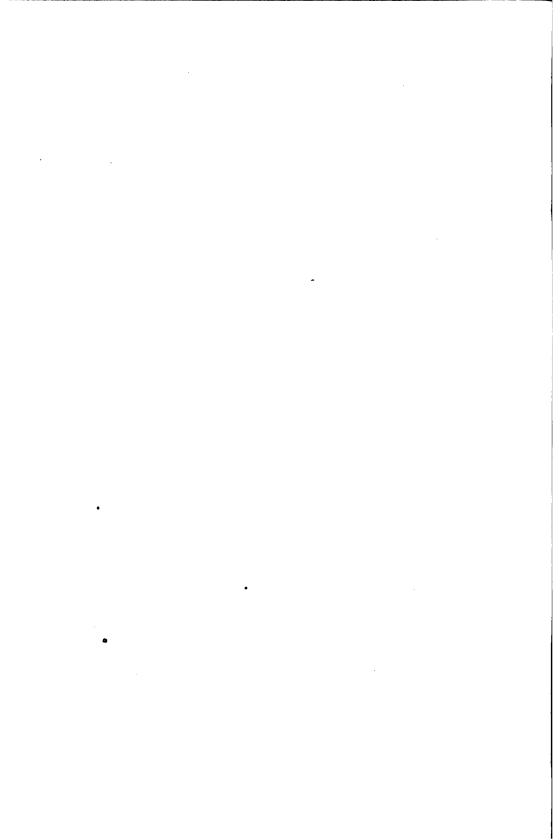
"Ah! if he only were by my side, How closely I'd cling to his fervid breast! How happy I'd be as his ocean bride! And he, in my love how blest!"

"I'd spread for him softly a mossy bed, And seat myself by my darling there, And sing him to rest, while I pillowed his head In the waves of my golden hair."

"I'd tenderly watch him, and, as he slept,
If fairy-born visions his spirit beguiled,
I'd drink up his tears when his eyelashes wept,
And kiss his warm lips when in dreams they smiled."



WAVE-BURST, AT OVENS MOUTH, NEAR LIFE-SAVING STATION, BIDDEFORD POOL, MAINE.



"And when he awakened, my bright eyes should be The mirrors of love, where my lover might see As he gazed in their depths that their crystal throne, Like my heart, held his image and it alone,"

She mused, and her breathing was warm and quick; She sighed, and her throbbing heart beat fast; Her eyes became humid, and heavy and thick, From their silken fringe fell the tears at last.

She rose; one parting look she gave At her virgin home, then clasped the wave, Where the crystal door of her palace swung; Deep down in the yielding flood she sprung. With rapid stroke, yet firm and free, Her white arms flashed through the shining sea, And her gleaming track left its light afar, Like the glittering train of a falling star. She glided along o'er the coral groves, Where the nymphs of Neptune sing their loves, -She passed where the water Kelpies sleep In their shady caves in the sunless deep, -From her meteor path, as she cleft the tide The crab and the lobster scuttled aside, And the dolphin turned, with astonished eye, To gaze, as the Ocean's Queen swept by. Then upward, upward, away, away, She swiftly sprang to the light of day: Another stroke, and her speed was done; She shook the spray from her streaming hair; It gleamed like gold in the evening sun, Which never shone on a face so fair.

'Twas the close of a sultry summer day:
The sea shone bright in the sunset ray:
The sky was pure, and the winds were still,
And with softened voice and a nameless thrill
The murmuring ocean's deep-toned roar
Seemed turned to a gentle hymn of joy,
In the ear of the slumbering sailor boy,
As he rocked in his barge by the sounding shore.

The mermaid came o'er the placid sea, And swam to the slumbering sailor's side. "My wish is granted at last!" said she, "This dreaming mortal my lover shall be, "To live in my ocean home with me. "Oh! come! My darling! behold thy bride!

- "Though the maids of the shore may be kind and fair,
- " My love is more fond than theirs ever can be;
- "Oh, hasten! my beautiful home to share
- "In the deep of the dark blue sea!"

He dreamily turned, as she sweetly sung, And closer still to his ear she crept; His languid arm o'er the barge was hung, And drooped in the wave, while he deeply slept.

- "Ah come! to my wave-girt home with me!
- "Come, my dearest! and do not fear.
- "Long, long and happy our lives shall be,
- "And I'll hide thee safe in the secret sea,
- "When the winds of the storm come near."

The waves grew rough, and the sky was dark; The surge foamed white on the misty strand: The youth still slept, in the quivering bark, And the siren had clasped his hand.

- "Come, love! with me to my ocean home!
- "To my fairy garden, so cool and blest!
- "Through groves of coral together we'll roam,
- " And when we are weary, beneath a dome
- "Of jewelled beauty we'll rest."

The sky is darker, and cold the wind; The barque is tossed on the breaker's crest; The siren's arms round the youth are twined, And her eager lips to his own are pressed.

Next morn, in the light of a stormy dawn,
The sea cast a wreck on the lonely shore—
The sailor boy's boat, — but its freight was gone;
The dreamer returned no more.



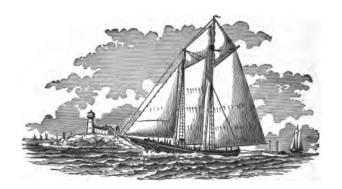
BIDDEFORD POOL, MAINE, FROM THE BEACH ROAD.

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POOL STRATEGY.

A CAPITAL story is told at Biddeford Pool, illustrating a rivalry that formerly existed among the pilots of that vicinity, whose custom it was to watch for Saco bound vessels in the offing, and board them at sea. There were quite a number who were acting as pilots, and a spirit of emulation actuated them as to which should get first to the vessel, and there were pretty exciting contests in their efforts to obtain the job. All were capital sailors, and every bit of their agility and skill was put in requisition to win. One day a brig was seen in the offing, and it signalled for a pilot. She was not far from land, but to reach her it was necessary to round East Point, making a long stretch of miles for the pilot to overcome. Two pilots in one boat started on a run for the prize, and put in all they knew to accomplish the object, tussling with the tide and sweating with their endeavor. After the boat had left the landing, a stout pilot, who had stood calmly whittling a stick, with a queer expression on his face and a twinkle in his eye, showed signs of activity. He gave no indication, however, of intention to follow his rivals, though he watched them eagerly until they were hidden from his sight by the Lobster Rocks. Then he became all alive, like a black-fish. Seizing a common light gunning float, that lay at the wharf, he vanked her from the water, and without a word

to any one, signifying his intention, he threw her upon a wheelbarrow, and started upon a run across the neck to Long Beach, where he launched his boat and was soon on his way to the brig, hidden from his contestants by the intervening land and rocks. He soon gained her deck and took charge of her, when soon, rounding the point, in the distance, came the rival pilots, pulling for dear life. The occupants of the boat rushed up the brig's side and were astonished to find Capt. Bill at the helm, whom they had lately left at the landing, whittling, as meek as Moses, but as crafty as a cat. Between the two disappointed ones remarks were made about Capt. Bill, more emphatic than complimentary, but they soon got over their chagrin and stood the laugh at their expense like heroes. Capt. Bill's "strategy" was long a story at the Pool, and some of the older ones laugh at it even now.



EARLY FISHERIES OF CAPE ANN.

IN 1623 a fishing vessel from England, having completed her cargo in "Mattachusetts Bay," sailed for Spain leaving fourteen men in the country at Cape Ann, to await her return. Early in the next year the same ship, with a consort, came to Cape Ann, and after an unsuccessful fishing season set sail for England, leaving thirty-two men here. The following year three vessels came from England, and an effort was made to establish a colony here under the governorship of Roger Conant, but the attempt was abandoned. In the course of the year, Mr. Conant, and some of his companions, removed to Salem and founded the colony of Massachusetts Bay. The fisheries of Cape Ann, as and permanent industry, seem to have a considerable become fairly established about 1722, when the business was conducted on a somewhat extensive scale at Annisquam, and also in a lesser degree in the harbor parish. About seventy schooners were owned in Gloucester in 1741, nearly all of which were employed in the Grand Banks fishery. The tonnage employed in the Cape Ann fisheries at the outbreak of the Revolution, could not have been far from 4800, employing about 600 men; yearly product \$100,000.

The Revolution put an embargo upon bank fishing After peace had been declared the business was resumed.

In 1804 the whole number of vessels, over thirty tons, engaged in the Cape Ann fisheries, was only eight, and for nearly a half century fishing was almost totally abandoned.

The shore fishing reached its maximum in 1832, when it employed a tonnage of 6483, and 799 men. Annual value, 157,784 dollars. From this time the business, except as a winter industry, began to decline, giving place to mackerel fishing, and other modern branches of the industry. Following are a few statistics in regard to the present fleet and bank fishing:

Cape Ann of To-day.—Cape Ann is a prominent head land, dividing the waters of Ipswich Bay on the north from those of Massachusetts Bay on the south. Next to Maine, it is the most bold of the New England coast. In Ipswich Bay and upon the shoal grounds, the cod-fish and other species find favorite feeding places. It is here the Cape Ann fishermen have the best shore fishing during the fall and winter. Ipswich Bay has thus proved to be a good place for cod-fish, the fish remaining until into June before going into deeper water. The catch in late years has been very large, reaching, in the spring of 1879, 11,-000,000 pounds of round fish.

Extending along the coast of Massachusetts, New Hampshire and Maine, we find the cod and other species. Jeffrey's Bank, to the eastward of Biddeford Pool, is resorted to quite frequently.

Fishermen who go out only for the day are obliged to keep pretty well circumscribed as to distance and generally have their own shoal marks opposite their homes and places of evening shelter.

Two methods of capture only are extensively used by fishermen on our coast; hand-line and trawling. Hand-lines have always been used from the earliest times, and are still used largely on the shoal grounds. When a fisherman uses the hand-line, after the desired shoal is reached,

the "killock" is dropped, and then he seats himself upon the middle thwart of his boat, with his face toward the stern, his lines and gaff by his side, and his bucket of bait before him. He uses two lines, each having two hooks (or one on each just as he fancies). The leads vary in size from two to four pounds, as the tide may be swift at times and it will require more weight to keep the line down. The depth also has something to do with the size of the lead. The hooks are baited with herring or clams, the lines run down till they reach the bottom, and, when the lead strikes, about six feet of the line is drawn in, which allows the bait to swing just clear of the bottom. The lines are then made fast to a cleat or oar-lock, and occasionally the lines are sawed across the edge of the boat, which keeps the bait moving, as fish are more likely to be induced to bite. On hooking a fish, the fisherman stands and hauls handover-hand, until the fish is at the surface of the water, and, if a large one, he strikes it with the gaff and brings it in over the rail of the boat.

The best fishing is generally early in the morning. The quantity of fish taken is dependent upon three conditions: the dexterity of the fisherman, abundance of fish, and quantity and kind of bait used. With regard to bait, it is often the case that fish change their tastes in this direction, as will be seen from the following fact. While herring are considered excellent bait, yet we find fish vary regarding it. Two vessels were fishing on "Tanto," thirteen miles from Wood Island, in a south-east direction, one of them hauling pollock, and large ones, too, the other fishing with fresh herring and catching nothing but dog-fish. Watching closely all the manœuvres of the other vessel, and thinking something might be wrong, the skipper got into his dory, rowed to the vessel, and inquired the kind of bait they were using. To his astonishment he found they were using salted clams two years old; and, inquiring whether the captain would sell him a barrel, got this answer: "I don't care about selling a barrel of clams, but I'll lend you a barrel and when we are in Portland together you can put a barrel aboard my vessel." He returned on board his vessel and almost immediately was just as successful in hauling pollock as the other, and the next day went into Portland with a good fare of fish. I knew of an instance where four men caught, with hand-lines, and with fresh mackerel, four thousand pounds of nice pollock, and had them all taken care of between sunrise and sunset, on the very same ground I was speaking of. I am in possession of many facts in regard to large quantities being taken by small vessels, fifteen to twenty tons measurement, and by hand-lines.

The other method of fishing is called trawling—and by this means it is thought the fish will soon be made scarce—which originated about twenty-five years ago, and has since come into general use. This method is used almost exclusively where the bottom is smooth. When used on a rocky bottom, the trawls become fastened and the fishermen often lose all their gear.

The trawl consists of a long cod-line—two or more are sometimes used to get length—and hooks are attached to short snoods, about six feet apart. The trawl has an anchor, of from eight to sixteen pounds weight, at either end, to hold it in position, while it is buoyed by small lines in order to discover its whereabouts if left over night, or even for a few hours during the day. Generally little kegs with flags are used for buoys.

A large vessel carries, say, from eight to twelve men and as many dories; the dories are nested upon deck, and when the desired ground is reached, each man, with his gear, leaves the vessel and proceeds to run his trawl. Of course the fishermen have wind and tide to encounter, and often it is so rough, even with the sun shining, that they meet with serious difficulties while fishing in this way. As before stated, each fisherman uses from one thousand to

twenty-five hundred hooks. The trawls are allowed to remain down several hours, and then they are hauled up and either coiled in a tub, to keep the whole from getting into a tangled mess, or, they are "underrun," rebaited, and allowed to run down again, perhaps to remain over night; in this case, a second buoy line is attached to a small weight on the end of the trawl, the other line being attached to a larger anchor only. In underrunning the fisherman stands in the bow of the boat, with a bucket of bait, takes off the fish, rebaits the hook and lets the line run down again. This keeps the ground if the fishing is good, and no time is lost, as some part of the trawl is always upon the bottom to tempt the fish with the alluring bait. Great quantities of fish are often taken in a single day. Record of 1878, made by schooner Geo. A. Upton, of Gloucester: 55,006 pounds round fish, two and onehalf days, eight dories, nine hundred hooks to a man. Gill nets are being used for cod-fish but they are often cut to pieces. Though not successful at first, I understand that large catches have since been made, and think the nets, on the whole, are going to be successful as another means of taking cod and haddock in quantities.

The bait is a vexed question for all salt-water fishermen. Much might be written and said about it, and when I state that fishermen will go with their vessels one hundred miles out of their way, simply to get bait, it will not be thought strange that they get discouraged sometimes. Fish are occasionally dainty (I have before spoken of this matter), and sometimes a hungry cod or haddock will take any kind of bait and that upon a rusty hook, but often are what we call "pickers," and require the sharpest of hooks and the most tempting bait. The prices often rule very high for such bait as sperling, mackerel and squid. Fishermen like to know what the fish are feeding upon and secure that if possible. Salt clams and frozen herring are used largely in the winter. Fresh clams and lobsters are

used by the inshore fishermen in summer. Fishermen who go out daily like always to have their bait fresh. bank fishermen must lay in a supply, in ice, sufficient for a week or fortnight. The fish find a ready market in Portland, Gloucester and Boston. The curing of fish has its peculiarities, and a few words upon this branch of business may not be out of place. Shore fish are brought in by the fishermen and sold to buyers, who salt them in butts that are tight and made for the purpose. During the hot weather in summer it is very difficult to dry the fish for market and they have to be kept in salt, covered with pickle until cool weather, when they are taken out and dried for market. The bank fishermen salt their fish, in bulk, in the holds of the vessel, or what is called "kench salting." A sufficient quantity of salt is used to keep them in good condition, and, as a voyage to the Banks requires some months, the cool days will have come before the fishermen return. When they do return, their fish are ready to be taken out of the vessel and put upon the flakes to dry. At Newfoundland and Labrador, the weather being cooler through the summer months, fish can be cured at all times, and it is from these places we get many of our finest dried fish.

FISH, FISHING STATIONS, &C.

TWO occupations feed the world, the plowman and the fisherman. Timid men plow, brave men fish. It is estimated that the latter, in all the world, gather from the sea, annually, one hundred and forty millions of dollars value, in food. Water harvests require no planting or seed time, for the sea is generous, "restoring, in one annual birth, the vast decay," and no man lifts a hand. Fishing is an honorable calling. The apostles, and great folks of the world, not apostles, engaged in fishing for food. rich merchant in London, named Tobias, a long while ago, got up a plan to make England the wealthiest nation on the globe, by embarking, on a large scale, in sea fishing. In the old Catholic centuries of Britain, 13th to the 16th, fish food predominated over meat. The first market in London, called the Stock Market, contained fifty-four stalls, thirty-six for fish and eighteen for meat. through this period, the wealthy people were fish dealers. In the fifteenth century, the Venetian ambassador to London wrote home to his master his surprise at the wealth of the fish-mongers. These men organized their guild in the twelfth century, and from that date the city of London was permitted to elect its own mayor. Early in the thirteenth century, this ancient company of fish-mongers had sixty-six of its members, Lord Mayors, of London, and

among them, the renowned Sir William Walworth, who slew Wat Tyler, a leader of rebels, in the city of London, 1381, in the time of young Richard II. Fish was the principal food. An ox averaged three hundred weight, sheep twenty-eight pounds, killed, but in one hundred years after England became Protestant, meat became general at all meals, and improvements carried the ox to seven hundred pounds, and sheep to ninety-four pounds. When King Henry VIII. organized the English navy, he manned his vessels with fishermen, and their wives took their place at the net and line on the wide seas. On this continent is found the best fishing grounds of the globe - from Nain, on Labrador, bordering the Hudson Bay, to Alaska, on the Northern Pacific, and these include the Grand and other adjacent banks. At present, fifty-five millions of people in the United States, from these sources, draw their fish food. When our population doubles a corresponding demand will be made for fish, and the commerce in that commodity, to supply the increased population, must necessarily pass and repass, between Cape Ann and Cape Cod, as the grounds for the fish of commerce lie in that direction, in the cold waters of the continent north, and no shift or drift of a central power in this country, that may carry with it commerce, manufactures and population to the interior of the continent, can disturb these great fishing grounds; a source of inexhaustible wealth for all ages to come. A prolific fish commerce will forever pass out and in, between the capes, and Gloucester, Portland and Provincetown, will be populous cities.

GLOUCESTER.— The foregoing, from a distinguished contributor to these pages, having included Gloucester in his prophecy, an article relating to the place, embracing old and new facts, may be interesting. From the voyage of Sebastian Cabot, to our eastern coast, in 1497, until that of Bart. Gosnold, in 1601, nothing is known regarding the discovery of New England. No attempts, indeed, were

made until Gosnold, that year, passed by what is now Cape Ann to the discovery of Cape Cod. It was left to the famous John Smith - honored afterwards with the empty title of "Admiral of New England," though he was denied, by unfavorable circumstances, more than one visit -to locate Gloucester in 1614, name Cape Ann (as now known), "Tragabigzanda," in honor of a Turkish lady, who saved his life, (called subsequently, by Prince Charles, "Ann," in honor of his mother, Queen Ann), attempt fishing settlements in Ipswich Bay, and do many other things for which his memory should to-day be honored. The first attempted settlement was from 1623 to 1625, and from the latter date, probably, Gloucester may reckon its beginning. It was of very slow growth for many years, alternating between agriculture and fishing, the settlement of Scituate, on the bay opposite, being a formidable rival on the water, and, though the facilities of harborage and convenience to sea made it a natural fishing station, they were not availed of to profitable extent, though the general court, at several times, gave its aid and support to the The territory contained much fertile fishing enterprise. land, and agriculture offered superior inducements. bly the same perils attended the occupation as at the present day, and it was not until a comparatively late period that it assumed proportions which have kept on increasing until it is the governing business at the present time. To show the intimacy of the sea cultivation with that of the land, it used to be said, that in planting corn there were two kernels of corn and a herring in a hill. Gloucester is the commanding fishing station in our country. Eastman, in his "Coast Guide," calls it the second in the world.

Wm. O. Haskell, Esq., now of Mason, N. H., a native of Gloucester, has furnished in the following paragraphs, a gossippy contribution of interesting items.

LOCAL ITEMS:-What is now Cape Ann is bounded by

Ipswich Bay, the Atlantic Ocean, Massachusetts Bay and the towns of Manchester and Essex. The principal settlement is Gloucester (or "Cape Ann Harbor" as it was called in early days), situated on the south side of the town. The whole coast of the peninsula is rock-bound (excepting Coffin's Beach at Annisquam, on the northerly side of the cape, that being several miles sandy), abounding in coves, inlets, seams and cracks-Rafe's crack (named for a man named Ralph), a remarkable fissure in the ledge between Norman's Woe and Kettle Cove, upwards of two hundred feet in extent, at right angles with the shore, varying in width from three to ten feet. The depth from the top of the rock, or hill, in shore to low water, is sixty-six feet, a remarkable ledge of large size, compact and of striking boldness. The waves rush into this chasm, and, as they dash back from the upper end, send out most frightful sounds.

There are several rocking stones hereabouts: one near Bass Rocks, at the end of a high ledge jutting out into the sea. Its weight is computed at one thousand tons, and it has a rocking motion of one inch, which can be effected by one hand at low tide. Rev. Cotton Mather called the attention of the public to this natural curiosity in his usual exaggerated style. At another place on the shore, between low and high water marks, stands a rock upon a rock, twenty feet long and ten feet wide, which moves many inches as the heavy waves strike its flat sides. In a pasture, at the north side of the cape, is a boulder, weighing seventy-five to eighty tons, resting upon a level rock, which may be set in motion by one person, so as to produce fifteen vibrations.

The highest elevation in town is a hill in West Parish (or "The Precinct"), called Thompson's Mountain, two hundred and fifty feet above sea level, affording a very extensive view in every direction. On this summit formerly stood the "King of Rocking Stones," a small mountain of

itself — a monster and a marvel. The U.S. Signal corps, fearing it might be an obstruction to their view, had it demolished several years ago. "Governor's Hill" is a noted eminence in town, where the General Court, during the Revolutionary struggle, resolved, April 16th, 1776, that a beacon should be erected, "the selectmen and two commissioned officers to have charge, and, when the enemy's fleet was discovered, to fire the alarm guns and set the bells a ringing." "Pigeon Hill," on the northerly part of the cape, is the first land that salutes the eye of the mariner as he approaches the coast from the east. Here are, likewise, the "Poles" or Poules, and "Farm Ledge," large masses commanding the attention of every beholder. The rocks of Cape Ann are granite, of a beautiful dark color and easily wrought. Large quantities are quarried, dressed, and sent off to southern and western cities.

The botony of Cape Ann boasts of a rare plant called the *Magnolia glauca*, growing naturally in a swamp at the westerly part of the town. It grows about ten feet high and bears a beautiful fragrant flower through the whole summer season.

There are but two ponds of magnitude in Gloucester. "Cape Pond" is the largest, which is near the easterly end of the cape, a charming sheet of water, covering eighty acres, surrounded by high rocky hills and is a favorite resort for parties, celebrations, pic-nics, &c., from surrounding towns and cities, and even as far as Boston. Another pond, of smaller size, is on the eastern point, and covers most of the width of the land on the point. A very narrow ridge, composed of sand and pebbles, separates it from the ocean. At times of unusual high winds, the spray is driven over the barrier and mingled with the water of the pond.

The islands near the cape and its harbors are few and small. Thatcher's Island, on which are situated two light houses and a dwelling house, contains eighty-five acres of good soil. "Milk Island," south of Thatcher's, is but little above the sea. "Kettle Island," owned by John Kettle in 1634, "Ten Pound Island," on which is a light, and "Five Pound Island," are inside the harbor. On the westerly side of the harbor, is Norman's Woe, noted for the loss of the ship Hesperus, the subject of Longfellow's poem. It is a large rock, a few rods from the shore, and connected with it by a reef, which the sea leaves bare at low water.

Rev. John Wyeth, minister of the third parish, was disliked by a portion of his society as lacking in sanctified dignity, and means were tried to get rid of him: such as firing musket balls into his house, and molesting him in various ways. It is related that on one occasion his horse could not be found by him in the pasture, where he had been put with several others, and some of his friends went in search of the missing animal, to saddle him for church attendance. After a long while he was found with a coat of whitewash all over his black hide. This settled his settlement.

Persons bearing the name of Haskell seem to have had a monopoly of Deaconship, in the several churches. Joseph Haskell and Benjamin Haskell were deacons in the first parish, and when the second, or new church was formed, they became members, and were immediately elected to the same office in that. At their decease their places were filled by other members of the same family, which kept this prominence in the church to the end of its existence.

The first privilege to build a pew, was sold for twenty shillings, to Benjamin Haskell, Jr., Mark Haskell and William Haskell, 3rd, who were to have the two back seats, going in at the west door, "to build a pew for them and their wives, and to be seated nowhere else." They had a committee to "seat" the people in the meeting house and sometimes, by vote of the parish, designated where persons should sit. Instance: 1742, Second parish votes that Capt.

William Haskell should sit in the fore seat where Capt. Eveleth sits, and that Joseph Haskell should sit in the side fore seat, that Mr. Joseph Hibbard's wife move out of the long fore seat into the short fore seat.

Gloucester was famous for smuggling exploits in colonial days, as officers of revenue would not be tolerated among the inhabitants. A schooner came in from a foreign port during the night; the hatches were immediately opened and discharge of cargo commenced, and a large portion discharged and stored before day-break A "tide waiter" was expected from Salem in the morning. On the cut was a watch-house where a stout Irishman was employed, to stop all strangers entering town and subjecting them to fumigation on account of small-pox being prevalent. When his majesty's officer of the customs arrived, he was ushered into the watch-house, kept till after dark, and purified from all infectious diseases. The schooner was unloaded and hatches secured when the officer found her.

For Gloucester is claimed the discovery that clams were good for bait, Zebulon Haskell, about 1734, being the discoverer. He left his son on shore, with a rising tide, to dig for clams, while he went gunning for ducks. The water surrounded the boy and he stood on his pile of clams, for protection, of course crushing them. While thus situated he saw small fish come and eagerly eat the clams, and, when rescued by his father, told him the fact. The old man took the hint, stored his cellar with clams and crushed them for bait, until his boy got a jackknife and opened them, making a business of selling bait to the fishermen.

At Chebacco, once a part of Gloucester (now Essex), the first "pinkey" or pink-stern schooner, was built, a small vessel now almost entirely unknown, but popular in old times as a sea-boat. One of these could weather any storm and ride the waves like a corked bottle.

Sandy Bay (now Rockport), is named from some local

association, as there is no sand there to give it its title. The probability is, that it is a corruption, or derivative, from John Smith's Tragabigzanda, reduced first to 'Bazanda, and from this, in time, becoming Sandy Bay. Many accept this as the probable fact.

Among the first Gloucester settlers, named to-day in history and tradition, was Capt. Andrew Robinson, grandson of Rev. Leyden John, of pilgrim memory, who was a remarkable man and a great Indian fighter and strategist. He was rewarded by the General Court, in 1730, by a gift of 300 acres of land in Worcester county.

Among the generations of old time Gloucester people, were Azarikam Blindman, Ebenezer Goslin, Samuel Absarsoak, Robert Scamp, Harlakendere Symonds, and Daubin Tarr.

There was a witch in Gloucester, old time, who, for an insult from two soldiers going with Pepperell to Louisburg, threatened them with vengeance. At the siege a crow flew ominously over their heads, which they shot at but could not hit with a leaden bullet. At last one of them loaded his gun with a silver sleeve button, and fired, when the bird disappeared. Upon returning home they found the witch was dead from a gun shot, and the identical button was found in the wound!

Gloucester's chronology is rich with events, historical and traditional, of which but few of Mr. Haskell's gleaning has been taken for want of room. The following chapter by a Gloucester editor, gives a fine sketch of "The Gloucester of To-day."

THE GLOUCESTER OF TO-DAY.

IF some of the ancient fishermen, who followed fishing from this port a century agone, could by some subtle metamorphosis have the power to return to earth, and wander about the old spots familiar to their youthful days, what a marked change would they observe in the place itself, and in everything pertaining to the fishing business.

Let us imagine one of these old time, weather-beaten "toilers of the sea," suddenly awakening and finding himself here in our young city by the sea. The harbor, where he spent so many hours of his earthly pilgrimage, sailing in and out, with his good luck and his bad luck, in summer's heat and winter's cold, would, undoubtedly, first attract his attention. We can imagine his great surprise as he wanders around the wharves. All is change. tle remains to-day to remind him of his day and genera-In place of the few insignificant landing places, which memory holds dear, he finds the entire harbor front, the old Fort, and all, lined with well built wharves, covered with spacious warehouses. The old moorings with their "stumps" used for fastening boats to, have been built over and disappeared. Instead of the small craft employed in his day, his eyes shine with delight as they take in the gracefully modeled, able looking yacht-like vessels of the present fishing fleet, as they come sailing up the harbor.

The marine railways would astonish them; the steamers of the Gloucester Steamboat Co., with their loads of fish en route for Boston, from whence it is distributed all over the country, or gliding in with their freight of supplies for the vessels. The tow-boats steaming along would fill the old fisherman with wonderment. The salt ships, laying at anchor, or discharging their cargoes, would also give him an opportunity for thought. Surprise would hold him captive, and, as he walked around in quest of something which would prove familiar, he would become more and more dazed. He reaches one of the Halibut Company's Wharves, and gazes with wonder at the extreme celerity with which a fresh halibut trip is landed, iced, packed and shipped; he visits the canning establishment, the oil factories, the box factory, the net and twine manufactories, with their cunning mechanism and labor saving machines, the boneless fish establishments, where fish are stripped of their skins, divested of their bones, and placed in neat packages, and shipped with marvelous speed. Everything is changed except the fish themselves. He handles the cod and recognizes an old friend. There is no change there. He is the same old fish which he pulled up from many fathoms down, when he, too, was a factor of this fishing sport, and lived his life, and passed on to that country where all the living will follow. He asks questions, and then he realizes that there is a great change in the catching of the fish, the handling, and all the modus operandi of the business. has been revolutionized, and the bustle and activity which meets him on every hand, makes him feel uncomfortable and out of his reckoning, and the old man, tired with his tramp, disappointed, as he surely is, in not meeting with any of the old familiar faces which were wont to greet him, begins to feel lonesome, and is not sorry when his time is up, and he takes his departure from scenes which have only served to remind him that he belongs to another age entirely.

AMERICAN METHOD OF CURING FISH, GLOUCESTER, MASS.



A few statistics will not be amiss, to give some idea of the change of tonnage and catch, of the day when the old man was in his prime, and of to-day. At the outbreak of the Revolutionary war, the tonnage of Gloucester was estimated at 4,800 tons, represented by 150 schooners and boats, employing some 600 men. The yearly product may be estimated at 48,000 quintals of fish, of a value of \$100,000.

To-day Cape Ann has the finest fishing fleet of any port in the world, and the largest in the United States. There are 501 schooners and boats, aggregating 30,827.02 tons. There are 48 fitting out establishments. Employment is given to nearly 7,000 men, including those on shore who are engaged in handling the fish. During the year 1883 there was landed, on an average, 130 tons of fish per day, Sundays included, which formed a fine food product, valued in round numbers at nearly \$5,000,000. This will give some conception of the importance of this industry to the country at large, and the great need of protecting it from such foreign competition as seeks its own aggrandizement.

FISH WEIRS.

MENTION is made, in several places along the pages of this book, of FISH WEIRS, by means of which much of the fish that supplies our markets is taken, without which, it is to be feared, we should often have an inadequate amount. Though long employed for taking fish, the importance of fish weirs has not, until recently, been fully recognized, The immense demand attendant on the growth of our country, in point of numbers and appetites, has called for increased efforts to meet it (or fish it), and a monstrous "catch" is the result. Through its agency we have a constant and abundant supply of many varieties of the fish known to our waters, and at rates so low that none need be debarred from their enjoyment. The trawl divides, with the weir, the credit of this, but that is only employed in deep-sea fishing, and they work separately for the general good, of which the poor, especially, reap the benefit. The family of no man, who has five cents in his pocket, need go without a good fish dinner. However great the draft made upon the briny capital, and notwithstanding the fear lest it be exhausted by the demand upon it, there is no evidence of its diminution. The increased demand does not seem to affect it any, and opposition, at first active against these extra appliances, has measurably died out.

That the early Indians used weirs, of a simple form, as

well as the spear and hook, for the capture of their fish, is proved by relics of their fish-craft, occasionally found on streams by which they camped to procure their winter supplies; probably unlike the weirs of to-day, but sufficient for their simple need. At the outlet of Lake Winnipiseogee, where the water leaves for the Merrimac, the remainders of such weirs have existed until within a few years, that have given the name, "The Weirs" to a station on the Boston, Concord and Montreal Railroad. It is true, authorities differ regarding their aboriginal claim, but the traces of these old weirs bore evidence of sufficient antiquity to warrant the assumption. The construction of weirs as now generally made, which last locality endeavors to improve, is as follows:

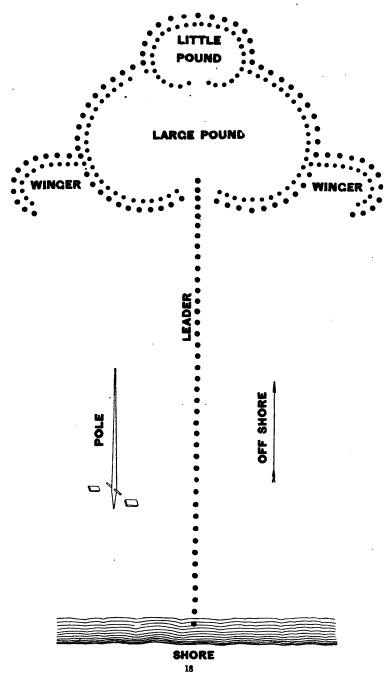
It consists of what is called a pocket and two leaders, the leaders conducting into the pocket. They are made of coarse twine net work, and the meshes are about one and one-half-inches, or small enough to prevent the meshing of diminutive fish. One of the leaders runs out from the land, in a straight line, a distance of one hundred yards or more. The network is attached to long poles, which are set deep in the sand and project above the surface of the water high enough to be above the tides. The other leader is laid out in nearly the form of a circle, with a circumference of two or three hundred yards, there being an opening on the shore side, into which the first named leader enters. Inside of the circular leader is the pocket. or "trap," in which the fish are caught. The entrance of this pocket is wide enough to admit a small boat. The pocket is attached to poles and set in the sand, similar to the leaders. Every pole has attached to it a line and anchor to keep it permanently fixed. Fish, on striking these leaders from any point, follow them along, attempting to get by. If they strike the straight leader, and follow it to the shore, they turn and follow it back, which takes them into the other leader. Here they soon strike

the network of the pocket, which they follow, and find themselves inside, completely entrapped, with not a chance for escape. There being a bottom to the pocket, there is no way for the fish to get out, except by that through which it got in. It requires four or five men, with two boats, to tend a weir, one boat a dory, the other a larger and stronger one to carry away the fish. The weir is visited every morning, and the pocket is entered at the same opening employed by the fish. When inside, the men haul up a door made of network, which closes the entrance. They then take hold of the pocket at one side and gather it up until they get the fish into as small a compass as possible, when they pass them into the boats with dip-nets.

By a letter and diagram that I have received from a gentleman at Cape Cod, — written at the request of E. H. Brazier, Esq., of Chelsea, a sojourner during the summer at Orleans, —I am enabled to present the Cape Cod method, between which and that of places to the eastward there is little difference. The "pockets" at the Cape are called "pounds." The "gathering" is done by attaching the net to the rear of wagons going in different directions which bring the fish to the centre. In plentiful seasons, Mr. Brazier informs the writer, the amount of blue fish and mackerel caught is enormous. On one occasion a large number of carts were driven down into the enclosure, and loaded with large fresh blue-fish pitched on with hay forks. This is doing grand business by the "pound."

The following is the substance of the letter alluded to which was accompanied by a diagram of the pound, which is here introduced:

"From the shore to the outer end of the weir is one mile. The little pound is about seventy-five feet across. The big pound about two hundred feet. It requires for the whole weir two thousand poles; for the little pound thirty long and two hundred short poles, for the big pound, two hundred long and three hundred and fifty short. It requires three hundred and fifty short poles for the wingers, and nine hundred for the leader. The short poles are set



about three feet apart, while the long poles are set nine feet apart. It requires twenty thousand laths for the whole weir. When a weir is set a hole is dug about two feet deep, then the pole is placed in it with the pin about six inches from the surface. Then two small boards are placed over the pin, and two men standing on them settle the pole into the sand six inches more. When the pole is deep enough some hay is thrown upon the pin and then covered with sand, thus fastening the pole solid in the sand.

Around the pounds, close to the laths, hay is thrown and over this some heavy stones, to prevent the tide from gullying the sand.

Between the poles, the laths, split in two, are worked in, and the long poles are to put nets on, stretching to the short ones, to prevent the fish from escaping over the top at tides that sometimes rise over the shorter poles. The outside poles are some two feet higher than the inner. The poles are young trees, and strong to resist the waves. When the tide flows in, the fish follow to near shore, and striking the line of poles follow it down the pounds, where they are left by the tide."

On the Connecticut river, and other streams where the festive shad abounds, weirs in some form are employed, and on the Penobscot, the lordly salmon is misled by false leaders to his ruin. The weirs there are framed sunken structures, with loose board bottoms, that rise and fall with the tide, regulated by weight, a pocket, or pound, of one of which broke away in a storm, not long since, and drifted upon an island near the mouth of the river, where it lay upon the rocks, as a summer resident informed me, like an exaggerated hay cart, the slats intact. These weirs, however, are not frequent, as the seals are dear lovers of salmon, and when they find a lot impounded they invade the precinct and bite a piece out of the throats of the captives, which kills them and renders them unfit for the market.

On the Columbia river, what is called a weir is used for taking salmon, in some places, where available, but it bears no relation to the weirs of which our fishers know anything. It consists of a large wheel of ten feet diameter, with blades, or scoops, five feet wide, made of coarse wire netting, framed in enough wood to be moved by the current in which it is stationed. This wheel is placed where the water runs rapidly, but it does not offer resisting force

enough to be very quick in its motion, and the salmon, which always hugs the shore, gets into one of these revolving pockets before he knows it, and is landed in some receptacle prepared for him. I learned this from a not very observing man, who only carried the general idea in his mind, but it warrants the belief that there must be something in it.

But there is no sport in weir fishing, anyhow, and nothing but business necessity can justify it. There is so much cruel waste in it, there are such multitudes of fish that are thrown away, such multitudes of young fish that are prematurely cut off, that the method seems revolting; but the people must be fed, and therefore the weirs have the popular verdict.



THE BRIGHT SIDE OF FISHING.

A SUMMER INCIDENT.—August 31st, '83. While the gay carnival of the yachts, and other racing, was going on at Old Orchard, the Jennie B. was anchored in the bay and in a position where all could be seen and enjoyed, and, at the same time, her genial party indulged in the excellent sport of mackerel catching.

The day will long be remembered by those whose privilege it was to be there and "wet a line." The catch was a good one for the season, resulting in some noble specimens, a few weighing as much as two pounds each, and perhaps a hundred of ordinary size, and two hundred "tinkers."

The day following, September 1st, we started for the outside fishing grounds. This time I had as a companion Mr. H. L. Johnson, banker, of New York City. The start was not very early (6:30, A. M.), and with a moderate breeze we sailed out of the harbor, passing Wood Island about 7 o'clock. Our progress, owing to very light winds, was slow indeed, as it took us nearly four hours to reach the vicinity of the fishing ground, commonly known as the Peak, distance eight miles from the Pool: then the misty condition of the atmosphere shut out the shore marks, and we thought it was to be "all day" with us as regarded fishing, but, fortunately, we espied a vessel

at anchor and ran down and spoke her. She proved to be a fisherman, and our captain shouted:

- "On what grounds are you anchored?"
- "On the Peak," was the quick response.
- "How long have you been on the ground?"
- "Since yesterday morning."
- "Any luck?"
- "Yes, have had some luck; nothing extra, though."
- "How's the water?"
- "Well, say about forty fathoms. I am not on the shoal ground; if you run a little to the southward you will find about thirty fathoms and that is the shoalest ground."

Our captain had received all the information he wanted, as he was familiar with the shoal when once he was upon it, and ran down about a quarter of a mile, when, without sounding, he rounded to, lowered jib, and hove the anchor.

When the Jennie B. fetched up, all fast, the fore and mainsail were clewed up for business. We had brought up just where we wished to be, in twenty-nine fathoms of water. The bait we had was the mackerel caught the day before, in quantity about one and one-half bushels, iced down solid. Almost as soon as our lines were upon the bottom the cod and pollock began to respond, and they were good samples. We had the dog-fish to fight and skates to haul in and take off, but, notwithstanding these annoyances, we caught thirteen hundred pounds of as handsome cod and pollock as were ever landed at the Pool. It was, indeed, a busy day. Our record in round numbers was as follows: One cod-fish 60 pounds; seven aggregating 200 pounds; eight haddock, about 6 pounds each; forty-three pollock, average 20 pounds each; cod-fish, from 6 to 12 pounds, making up the balance. We up anchor at 4, P. M., and had a good breeze home. The men split and put the fish in pickle the same night.

In speaking of the "bright side of fishing," the term is not always the result of days of bright weather and pleas-

ant seas, for though these conduce very much to the enjoyment of the amateur sport, to the yachtman and fisherman that day is the brightest that brings the best luck, and, absorbed by his calling and hauling, the scene outside enters very little into his thought. The two days described in the foregoing, presented the two phases of a fisherman's life, or both sides of the question, and whether, during the pleasant inroads upon the mackerel, with a yacht-race thrown in under a bright sky, or the next day in the fog upon the Peak fishing ground, to him both were alike bright. The weather, on return, was but an incident in the brightness of which the "catch" was chief.

Mrs. Anne Bradstreet, the wife of Gov. Bradstreet, who wrote about the middle of the seventeenth century, had some nice ideas regarding fish and the pleasures of the sea. She thus versifies:

"Ye Fish which in this liquid region bide,
That for each season have your habitation,
Now salt, now fresh, where you think best to glide
To unknown coasts to give a visitation,
In lakes and ponds you leave your numerous fry,
So nature taught, and yet you know not why,
You watery folk that know not your felicity.

"Look how the wantons frisk to taste the air,
Then to the colder bottom straight they dive,
Up soon to Neptune's glassie Hall repair,
To see what trade the great ones there do drive,
Who forrage o'er the spacious sea-green field,
And take the trembling prey before it yield,
Whose armour is their seales, their spreading fins their shield."

Then follows a prophetic view of yachting, with a moral quite effectively drawn:

"The Mariner that on smooth waves doth glide,
Sings merrily, and steers his barque with ease,
As if he had command of wind and tide,
And now become great Master of the seas;
But suddenly a storm spoils all the sport,
And makes him long for a more quiet port,
Which 'gainst all adverse winds may serve as a fort.

"So he that saileth in this world of pleasure,
Feeding on sweets, that never bit of th' sowre,
That's full of friends, of honour and of treasure,
Fond fool, he takes this earth ev'n for heaven's bower.
But sad affliction comes and makes him see
Here's neither honour, wealth nor safety;
Only above, is found all with security."

oseph Green, a funny rhymer in the latter part of the eighteenth century, wrote some verses parodying others of a serious nature, by Rev. Mather Byles, the Tory Parson, of which are two, as follows:

"With vast amazement we survey
The wonders of the deep,
Where mackerel swim, and porpoise play,
And crabs and lobsters creep.

Fish of all kinds inhabit here,
And throng the dark abode:
Here haddock, hake, and flounders are,
And eels, and perch, and cod."

The author must have had Biddeford Pool in his mind when he wrote.



THE DARK SIDE OF FISHING.

This is illustrated often—far too often—by the experiences of those who pursue fishing as a profession, who are called to push their prows into perilous waters where the fish abound, and find disaster, fully as often as luck, awaiting them. The yearly record of wreck and widowhood at Gloucester seems almost enough to turn men from seeking fortune—so small at best—on the treacherous Georges. Yet there seems no diminution of the number that, year by year, go to what so frequently proves their doom. This story of peril and hardship is from the *Vinalhaven Wind*, and is but one of many occurrences of a similar nature, which interest and shock the reader:

A NIGHT ON THE GEORGES.

It would be hard to name a branch of business in the known world that is attended with so much loss of life and property as that of the fisheries. The fishing vessels of to-day are models of beauty and staunchness, and to watch them sail away in the summer for mackerel, and return in the fall, with colors flaunting in the breeze and a full trip, one gets an idea that such a vocation must be pleasant and profitable, and it generally is such. We've often heard men engaged in this branch of the business relate the pleasure and excitement it affords, although the autumn months are often accompanied by high winds and rough waters, with more or less danger. This might well be called the bright side of the picture. But to the fisherman, with a family dependent upon him, who has to resort to winter fishing for a livelihood, the scene is altogether changed. Then the placid summer sky and balmy breezes give place to boisterous winds, thick driving snow storms, and terrible gales, which are always accompanied with more or less loss of life and property. We are not

much acquainted with this business, only by observation, which teaches us that the man who earns his living by Georges or Bank fishing in the winter season, veritably takes his life in his hands. The recent purchase in this vicinity of schooner Chas. Haskell, has led to the writing of this sketch, and although what we are about to relate happened years ago, it will be new to many and interesting to all our readers. To begin with, the above named vessel has had the most remarkable escape ever known in the history of Georges fishing, that of having collided with another vessel, and escaping comparatively unharmed. We give the story, as told by W. H. Paige, of this town, who was one of the crew of the Chas. Haskell at the time:

"It was Saturday, the 6th day of March, 1869. I remember it well; there was a light breeze from the eastward, and we had quite good fishing. Towards evening the wind increased to a gale, accompanied by driving sleet and snow, and it was almost impossible for a man to stand on the deck. Any person experienced in such matters, knows, that by placing your foot on the hawser, you can tell if the vessel is dragging her anchor; knowing this, and that we were likely to drag, I sprang into the cabin, procured a hatchet, and stood ready to cut our hawser at a moment's warning. The usual signs failed, and I left the post to some other. While going aft, I noticed that we seemed to be drifting, for I could see the lights on other vessels as we went by them. Examination proved that we were drifting, and I am positive that other vessels cut their cables for us, that is, to get out of our way. The wind was slowly hauling to the north, and we cut, at the same time running up our foresail, intending to fill away to the south-east, but instead, our vessel drew away to the north-west, and we had to let her go. By this time the wind was blowing so furious and the hail was so blinding that we could scarcely see more than our vessel's length in any direction. The captain had the wheel, and about 10 o'clock the lookout saw a light, and thinking it was a vessel at anchor, he immediately sang out "Hard up!" which was as quickly responded to. If the other vessel had been at anchor, as we thought she was, we could easily have cleared her, but, as it afterward proved, she was under sail, and running in an opposite direction from us, she came on across our bow, as if courting destruction. Soon there was a crash, and it seemed that as our vessel was in the trough of a huge wave, the other must have been on the crest of it, and we pierced her just below the water-line, just abaft the fore-rigging, breaking our bowsprit short off. The next wave rising threw our vessel forward and we struck her again about midships. I asked the captain if the wheel was hard up, and he answered that it was, at the same time saying, "We've done all we can do." The other vessel (the name of which we never learned) went down in less time than it takes to tell it, and her crew found a watery grave. We of course expected to go, but we came out all right, except the injuries to our vessel, which were numerous. The fact of our vessel keeping head on, and the breaking of our bowsprit, is in my opinion all that saved us, for if we had swung alongside the other, we should have surely met the same fate. We heard no human outcry, nor saw any signs of life on the other vessel, only I thought that just for an instant I saw the dim outlines of two men, and then all was dark. After the accident, I had the wheel all night until 3:30 in the morning, and such a night I hope never to experience again. By morning the wind was north-west, and it was so bitter cold, that our watch was reduced to 15 minutes a man. On summing up the extent of our damage we found that our bowsprit, jib, mainboom, boat and every movable thing on deck were gone; even the planks, used for cutting bait on, that were spiked to the house, were washed away, and our forward planking was badly started. Our destination now was Gloucester, but having only one whole sail, our progress was slow, and on Wednesday night, the 10th, we were hove to in another gale, blowing from the south-east. 'Twas a severe one, but we lived through it, and arrived at Gloucester early the following Saturday.

Co-incidental with the foregoing is the following description of the perilous position of one of our own Maine fishermen, his escape from which seems most marvelous. The old New Hampshire *Gazette* tells it in the man's own words—Mr. David Briggs, of the sloop Maine Girl:

ADRIFT IN A DORY.

"I left the sloop Maine Girl," said Mr. Briggs, "at about ten o'clock Thursday morning to go to my trawls, and had commenced hauling them when they parted. I then rowed to the middle buoy and hauled two tubs of trawls, getting about five hundred pounds of fish; then jogged around to find the boat. The wind at that time was blowing north-east, and I went toward the Shoals, as I supposed; could not see anything, as the snow was falling in huge flakes, and so thick that an object ten feet off could not be discerned. I rowed for several hours, and not making land gave myself up as lost. About half an hour before dark I sighted what I supposed to be Whalesback light, but on seeing breakers found I was mistaken; it was probably the Newburyport light that I saw. I came to an anchor, and laid all night until five o'clock Friday morning, when I let the boat drift toward Halibut Point, Cape Ann. I could see the shore and could tell by the lay of the land where I was. I commenced rowing again, and attempted to get into Rockport, but the wind was blowing a gale from the north-west and a strong tide was running from the shore, heading me off. I again came to an anchor at half-past eight o'clock, laid there about half an hour, and then cut loose and started for Thatcher's Island, but could not reach it, and was drifted down toward the Salvages. When about half a mile inside of the Salvages I saw the steamer City of Portland about one-quarter of a mile from me; I put up an oar as a signal of distress, and the steamer backed down toward me and threw a line over the stern, which I caught and held on to until they lowered a boat and took me on board. I was in an exhausted condition, wet through to the skin, and do not think I could have lived two hours longer. It was half-past nine o'clock Friday forenoon when I was picked up. It was severely cold during the night and morning, and when laying at anchor in the night I was paddling around most of the time, and would occasionally for a few minutes lie down in the bows of the dory to rest - but did not allow myself to go to

sleep. The spray would fly over me, forming ice, and completely wetting me to the skin. To attempt to describe the sensation of fear and hope when out in an open dory, in a cold winter night, knocked about on a sea roughened with combing waves, and winds blowing fiercely from the shore, could hardly be illustrated by an expert in word-painting, and fully realized only by those who have had similar experience. I feel deeply indebted to the captain and officers of the steamer City of Portland who so kindly cared for me, and to the many friends who have given me a generous sympathy since my return home."

The Banks of Newfoundland are about one thousand miles from the New England coast. Great Bank, the largest of which extends north and south about six hundred miles, and east and west some two hundred, lying southeast of Newfoundland. The Banks, or Georges, seem to be an especial rendezvous of fish, particularly cod. Though fished, for two centuries, by multitudes of fishermen, there is no sign of abatement, and hence the Georges possess great attraction to those who desire large fares and quick returns, and dare its perils of fog, storm and ice for its fortunate promise.



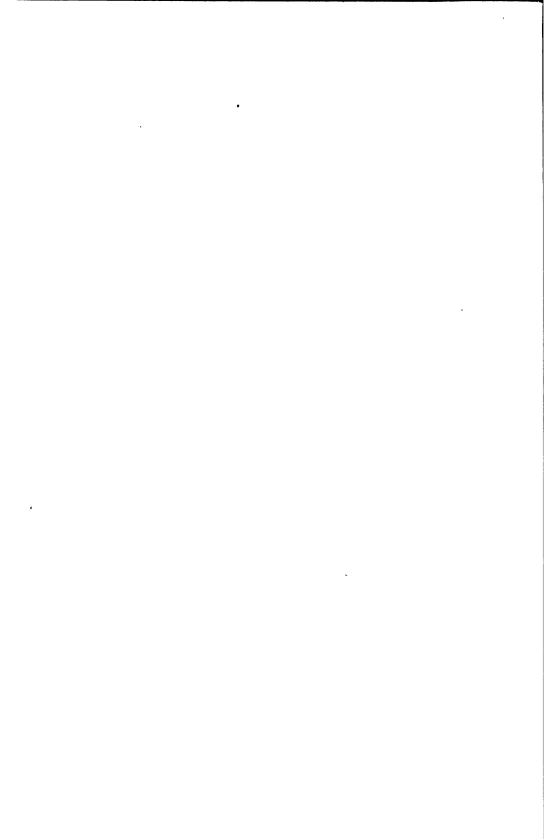
FROM BIDDEFORD POOL TO BOOTHBAY.

WE are off for a trip to the eastward in the Jennie B. Geo. W. Coburn, of Boston, and myself talked the matter over after breakfast, and we concluded to take a little excursion to Squirrel Island, which lies at the entrance of Townsend Harbor, Boothbay. We started precisely at 10:15, A. M., sailed down through the anchored shipping in the harbor, and with a fair wind were soon out upon the ocean. At 12:15 we had made good headway. The wind blowing fresh from the south-west made the sea pretty "choppy," but the Jennie B. bounded gracefully over the waves. Our course carried us three miles from Cape Elizabeth, on which two light-houses have been erected. These light-houses mark the entrance to Portland Harbor, and are also a guide to ship-masters when on this part of the coast. At 12:30, P. M., we were opposite Harpswell, ten miles distant, while Orr's Island (made famous by Mrs. H. B. Stowe's story, "The Pearl of Orr's Island"), loomed up in the distance.

The Jennie B. was "balling it off," as the old sailors say, at the rate of seven knots an hour. At 12:50, P. M., the wind had increased, and the captain thought it would be well to reef the mainsail. This work was done in a very short time, and we were gliding along pretty fast. The pleasures of sailing cannot be fairly appreciated by



BIDDEFORD POOL, MAINE, FROM FORT HILL.



those who are unable to stand the pitching and tossing motion. But to one who can stand this, it is charming.

Mr. Coburn had been watching with much interest the progress we were making, but feeling somewhat tired he concluded to lie down on deck and take a rest. But just as he had fairly settled down for a little quiet, a white cap splashed over the side, which brought him to his feet very quickly. At 2:15 we were nearly opposite Seguin Island. This Island, which lies three miles south from the mouth of the Kennebec River, is really pretty. Towering above the ocean with its bold, rocky headlands, it marks the approach to the Kennebec and Sheepscott rivers. On the highest point of the island stands a grey stone light-house, which, by night, throws its rays for miles across the sea.

Four hours only had been occupied in running down from Biddeford Pool to Seguin, thirty miles. And so far it had indeed been very pleasant. And I can say that I enjoyed myself every moment of the time.

Passing inside Seguin Island, we found very rough water. This is caused by the strong ebb tide that empties the waters of the Kennebec at this point, and the fresh southerly breeze that was blowing in an opposite direction. At 3:05, P. M., we passed the steamer City of Richmond, from Mt. Desert, bound to Portland. At this point we passed two ledges, that lie to the eastward of Seguin, two miles distant, completely covered with sea-gulls. The captain remarked that he thought the gulls were holding a caucus. I assented to this remark, and hoped there would be no foul (fowl) play used, as each one presented his bill, and discussed the prospect of a good fish-dinner at the end of the session. Continuing on our course, we crossed Sheepscott Bay, passed in by the Cuckolds and came to anchor in the little harbor at Squirrel Island at 4, P. M., having spent only five and three-fourths hours from the time we left the Pool.

No sooner was our anchor fast on bottom, than dinner

was announced. This was a welcome sound, for with pitching, rolling, and the exhilarating breeze, our appetites had not suffered in the least, and we were ready, with thankful hearts, to accept the invitation to supply the wants of the inner man.

After dinner Mr. Coburn and myself went on shore to take a survey of the island with its surroundings. Squirrel Island is a place of considerable note. A few years ago a party of gentlemen from Lewiston purchased the island for a summer resort. Since that time, some seventy-five fine cottages have been built. These, together with the chapel, store and large hotel, give to the island the appearance of a small "City by the Sea." No one is allowed to build here unless it is conformable to the pleasure of all concerned, and the best sanitary measures are in force at all times. And as far as we could learn, the best of order prevails. One great feature of the place is that no intoxicating drinks can be bought there. This rule, I am glad to say, is strictly enforced. We found a comfortable library and reading room, and everything around had the appearance of comfort and contentment, with nothing to mar the pleasure of those who seek this place for recreation in summer. I made inquiries for the Messrs. Dingley, of Lewiston, Maine, editors of the Squirrel Island Squid, but was informed that they left for their homes the day before, and the office of the Squirrel Island Squid, published there weekly, through the summer months, was closed. I however obtained a few back numbers, which I found very interesting and spicy.

Should any of my readers visit this part of Maine, they must not forget to take a trip to Squirrel Island, for I think it is a beautiful place. The air is salubrious, there is good fishing, boating and bathing, and much to amuse and instruct the student of nature. The southern part of the island presents a bold front to the sea, and, when old ocean is wild, it is a grand sight to see the waves leap

and bound against the rocky heights. Some days hundreds of vessels pass the island on their way to and from the harbor.

After a short stay on the island we returned on board the Jennie B., got under way and took a run up to the harbor, passing on our way Burnt Island, on which a lighthouse has been erected, and Mouse Island, which is a well-known summer resort. On this island a fine hotel has been built, and, during the summer months, hundreds of pleasure-seekers find this quiet place just suited to their wants. Mr. Geo. W. W. Dove, of Andover, stopped here in the summer of 1881, when on his canoe trip from Boston to Mt. Desert.

Continuing on our course for a short time, we rounded to and anchored in one of the finest harbors on the coast of Maine.

Townsend harbor is too well known to ship-masters to need any comments from me. But a few words to those who have never found here a sheltering place from the storm, or a quiet anchorage for the night, may not be out of place. I am informed by good authority, that more than five hundred vessels have been at anchor here at one time. When once entered we found our craft land-locked, and we were safe from any wind, let it come from what quarter it might. Easy of access, and deep water, make it truly a refuge for sailors, from the storm.

The town of Boothbay is situated on the coast of Maine, between the Damariscotta and Sheepscott rivers. There are many fine islands and harbors within its jurisdiction, the more prominent one being Squirrel Island. It has a number of pleasant villages, located on the east and west sides. Shipbuilding has been carried on quite extensively, years past, in different parts of the town, and from the ship-yards at Hodgsdon's mills and the harbor, many fine crafts have been launched. Fishing has also been pursued with more or less success. But no part of the town has so many

attractions as West Boothbay, situated at the head of Townsend Harbor, where our little craft lay at anchor. This part of the town has undergone a wonderful change within twenty-five years. From a few houses, and one or two small stores, the town has increased so that, at the present time, hundreds of nice cottages, several fine hotels, large roomy stores, restaurants and billiard halls, meet the eye on every hand. This has been accomplished by energy and enterprise. And where these are put forth, coupled with perseverance, prosperity is sure to follow.

During the summer months a steamer touches here twice a day, on her way to and from Portland. A small passenger steamer also makes two trips from Bath, landing passengers at Mouse and Squirrel islands, and stopping at the harbor over night. A pleasant ride takes one to the depot, where cars can be taken for most any point. We went on shore to telegraph to our families of our safe arrival. After leaving the telegraph office we ascended the hill, just back of the village, and got a fine view of the harbor and surrounding country. Squirrel and Mouse islands looked finely in the distance. The shipping in the harbor presented a beautiful appearance—one hundred and fifty fishing vessels, besides coasters, yachts and smaller craft, all anchored for the night. These, with the little villages in front, and on either hand, were a grand sight.

Night was drawing near and warned us that we must be moving. We descended the hill and walked down through the principal street, meeting group after group of fishermen. We could not help noticing the contrast between these hardy sons of the sea, men of different nationalities, clad in their fishing clothes and sailor garb, and the finely clothed yachtsmen, who were perambulating the streets. We visited a few stores, and found they kept everything to supply the wants of those that live here, as well as those that seek this place for a harbor. Shipchandlers, sail-makers, ship-smiths, spar-makers, grocers and

dry-goods merchants are found here, ready at all times to attend to the wants of the shipping interest. Many vessels put in here for repairs, and just west of the village is a railway for hauling out vessels that need repairing, painting, &c.

We called upon Mr. Fisher, who was formerly proprietor of a hotel here, but now keeps a large grocery and furnishing house, and found him to be very genial and sociable, and we sat down and had a real, right-good, square Yankee talk with him.

Sixteen years ago Capt. Frank, then in command of the sloop-yacht E. Lawson, was detained here one week by the fog. Maj. A. W. Pearson, of Quincy, Illinois, was with him, and they stopped at Fisher's Hotel during their stay. Maj. Pearson wrote a poem, giving a graphic description of the "Cruise of the Lawson." Mr. Fisher was very enthusiastic when speaking about the major, and his stay at the hotel; and I am sure that this evening's entertainment will not be readily effaced from my memory.

Mr. Coburn concluded to stop on shore for the night, and I returned on board the Jennie B., somewhat fatigued from the toils of the day, feeling that I could get a good night's rest in the cabin.

HOMEWARD BOUND.

SATURDAY, SEPT. 2ND.

At the call of the morning watch we were soon on deck, and Frank, taking the small boat, went on shore for Mr. Coburn. They soon returned on board, and at 5:30, A. M., we weighed anchor and filled away on our homeward course. The wind was light, but fortunately in our favor, and bid fair to continue so, at least until we should reach the open sea. Most of the mackerel fleet were under way, and, like ourselves, were moving slowly down the

harbor. Passing out by Mouse Island we continued on our course, while the fleet made its way out to the eastward. This was really a splendid sight: nearly two hundred sails moving so majestically out by the islands to the open sea beyond. We were soon off Squirrel Island, and at 6:30, A. M., passed Cape Newaggen and the Cuckolds. The morning air, beautiful ocean scenery, and the prospect of a good run to Wood Island, made us all feel happy as well as hungry, for our appetites were pretty keen.

At 7, A. M., breakfast was announced, and you may be sure we were not backward in partaking of this meal, admirably prepared by our cook. At 8:05, A. M., we passed Seguin Island and shaped our course for the Pool with a fair but light wind. In the distance the sea was dotted with white sails all bent upon some errand. Three small steam-tugs enlivened the scene with motion. One large three-masted schooner was seen coming out of the Kennebec River in tow by a tug. At 9:15, A. M., we were well up with Small Point, and the view of the coast was delightful. Just back of us old Seguin towered up, and looked like a mountain placed in the midst of The bluff headlands of Cape Small Point stood out in bold relief against the clear autumnal sky. Mark Island, Ragged Island and Roaring Bull were full in view, while the distant shore loomed up with a beauty and grandeur that delighted the soul. At 10:15, A. M., we were four miles south of Halfway Rock; but the breeze that had wafted us so pleasantly on our course thus far had entirely left us, and, to use the words of the skipper, it was "calm as a clock." Seeing that we could make no headway, I took my line and remarked to Mr. Coburn, "Now, Mr. Coburn, you are very fond of fish, and I will see that you have a nice cod for dinner." But fancy my feelings when I got soundings, and found my lead sticking in the mud. I changed my mind, but said nothing, as I knew, from the nature of the bottom, that if I caught a fish

at all, it would most likely be a hake. We drifted some with the tide, and presently my courage began to stir within me, when I felt my lead strike upon a solid ledge forty fathoms below. I kept the secret to myself, and in a few minutes bounced an eight-pound cod-fish on deck, exclaiming in a forcible manner, "There, gentlemen, your dinner is secured." Mr. Coburn, who had been a silent spectator since the fishing commenced, concluded to try his luck, and for half an hour or so we indulged in the luxury of a little fishing excitement, catching a number of fine cod and one nice haddock.

At 12:30, P. M., we hauled in the lines and trimmed our sails to catch the breeze that came in light puffs from the south. But oh! what a contrast from yesterday, when we passed very near this place with the wind blowing hard from the south-west, and what a difference in the surface of the water—yesterday rough, to-day as smooth as it was possible for it to be. It was just such a day as sword-fishermen like to see. I wish all my friends could have shared with me the enjoyments of this day.

At 1:15, P. M., we passed the North Atlantic Squadron, from Portland, five vessels in number and three barquerigged. They had been to Portland for orders, and were bound on a cruising expedition.

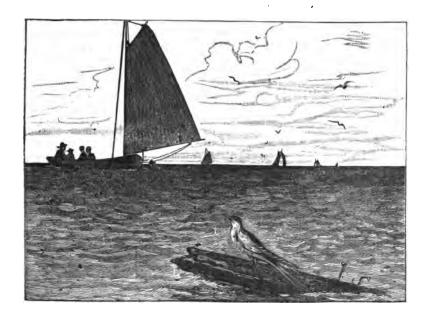
Dinner was the next excitement, and our appetites were sharp for that fried cod, as the rattling of dishes passed on deck, and the savory smell of fried fish indicated the near approach of a feast. But just as we were ready to appease our appetites the cry came from Capt. Albert, who was at the helm, "Sword-fish, ahoy!" Capt. Frank (we abound in captains), who had just wiped the perspiration from his brow, came out of the cabin on the double quick. "Down with the stay-sail," was the first command, and no quicker said than done. Then the frying pan was snatched from the stove, and the fish, placed in a tin, set under the stove to keep hot, along with the other fixings.

The next move found Frank in the pulpit, on the end of the bowsprit, with rod in hand just in time to strike: he did strike, and, quicker than I can relate it, the warp was payed out to the fish. I unreeled fifty to one hundred vards of warp off the barrel, and threw the barrel overboard, but still kept the warp in my hand, ready to pay out to the fish as he needed it, standing ready to let it all go if need be, for I had no desire to take a bath at this time. When the fish stopped running Capt. Albert and myself commenced to haul him up, and we were quite careful to keep the line away from our feet, for it would be a serious matter to have a fish on the end of the line, weighing from four hundred to five hundred pounds, and a man's foot entangled in the bight. The fish ran two or three times, but a shorter distance each time, so we concluded, as he was well ironed, to haul the monster up, which we did in a short time. When he came to the surface he was pierced through the gills and soon succumbed to his captors. Just fifteen minutes were occupied from the time the fish was struck until he lay on the deck of the Jennie B. We judged his weight to be three hundred and fifty pounds.

Dinner was now served, and we sat down to a good, hearty meal, feeling all the better for the waiting and excitement. Just as we finished our dinner another fish was discovered to the windward, but he was making such rapid progress in an opposite direction that we did not deem it prudent to pursue.

At 3, P. M., we had a fresh breeze from the southward, and, the Jennie B. skipping along finely, our prospect of reaching home early in the evening was good. At 4:15, P. M., the wind had hauled more to the west, and we were unable to make a straight course for the Pool. At 5:30, P. M., we were off Stratton Island, and from this point it was a dead beat to Wood Island, six miles distant. But this little inconvenience did not worry us at all, for as Mr.

Coburn said, "The experience and pleasure enjoyed so far on the trip, more than compensated for this little delay." We reached our moorings at 9:15, P. M., and the Jennie B. was made fast.



A CRUISE IN THE JENNIE B.

A VERACIOUS TALE OF THE PLEASURES, PRIVILEGES, PERILS AND PENALTIES OF THE MIGHTY DEEP.

By B. D. Ford Poole, Mariner, of that Ilk.

We've watched the day's declining, and the sun
Has sunk to rest amid a cloud of flame,
Chilling our hopes of the projected fun
That waited on the morrow's pleasant frame.
Soon from the hills the serried winds, pell-mell,
Come rushing down and stir the tranquil "Pool,"
While the fierce rain, in volume like a well,
Lashes the earth as 't were a rogue at school,
Leaving us there, in disappointment's sorrow,
To say: "Alas! 't is all up for to-morrow."

But Goldthwaite knows a hawser from a horse,
And reads the hints of Nature like a book:
Says he—"Don't croak, I've known it muchly worse,
With far more lasting terror in its look.
Don't judge to-morrow morning by to-night—
'T is foolish borrowing trouble; we shall see,
By midnight, all the stars out clear and bright,
And everything just as it ought to be.
I tell you, now, this splurge is to my wishing;
Depend upon't we'll have some superb fishing."

Hopeful we sink to tranquilizing dreams,
With Goldthwaite's promise ringing in our ears:
Our sleeping fancy tinging with the beams
That come in consolation from the spheres.
On deck betimes, we catch the salt sea air,
Moist from the waves beyond the slumbering Neck;
Old Jupiter flames down in brilliance rare,
And myriad stars the arching concave fleck,
While eagerly the Jennie B. seems waiting,
Our own impatient mood anticipating.

"The wind sits in the shoulder of the sail,"
The east just heralding approach of day,
When, loosed our fast, before the favoring gale,
The graceful Jennie speeds upon her way,—
Leaving the shore as if too long withheld,
And dancing gaily to the piping wind,
The while her crew, by joyousness impelled,
Are to a like exuberance inclined.
Their bounding hearts to bounding waves respond,
The sea regarded as a mother fond.

'Tis pleasant thus upon her breast to rock,
And feel the pulses of her mighty heart!
Although one neophyte she haps to shock
By overdoing, some, the "rocking" part.
He mourns too close regard of Mother Sea,
And, inharmonious with surrounding mirth,
Stirred to his boots, his equanimity
Upset, he, sick as death, crawls to his berth.

Upset, he, sick as death, crawls to his berth Yet in good time, o'er qualmish ills a winner, He will come out in healthy trim for dinner.

Now, gun'le-deep, we speed our way along,
And rapture feel in freedom such as this;
The sunrise greeting with a morning song,
Each bosom thrilling with excess of bliss.
And appetite, excited by the scene,
Revels in plenitude of apt supply;
No tempting menu of hotel cuisine
Can with this lunch al fresco hope to vie:
The coffee redolent as Samian wine,
With rolls, ad libitum, upon the brine.

The broad sea stretches to infinitude,

Flecked with white sails illumined by the sun,
The blue above and blue below, imbued

With kindred glories, mingled into one!
Oh Nature! for thy boundless lavishness

Thy votaries pour their orisons to thee,
While for those farther horizons they pass,

That outline on the bosom of the sea,
Which still recede as on they farther go,
As hope eternal springs — the rhyme you know.

Yet on and on, like gull upon the wing,

The Jennie B. ploughs through the briny field,
And lays her furrows as the shores of spring

Cleave the green sward, for quite another yield;
For there awaiting, near far Tanto's shoal,

Are myriads of fishes to be caught
That need no extra recommended toll
For their consideration to be brought.
Drop them a line, just to express your wish,
And the late ploughing yields a crop of fish.

Now cast the anchor, and upon the booms

Drops the broad canvas, 'neath whose grateful shade
Each piscator the favoring time consumes

In following the fisher's gentle trade: But not so gentle where the mammoth cod Essays his powers in the fishing line,

Who, lively as a trout with flexile rod,

May not to quick captivity incline, But gives his captor, whiles, a doubt if he Or the big fish will win the mastery.

Ah, this is joyous! here to sit and swing
In playful dalliance with the amorous tide,
Unheeding time, that flies with rapid wing,
Each moment fraught with sport intensified!

The swarming fish take hold with eager vim,

Whate'er they be that in such numbers teem; No matter to the fisher—all to him

Are blanks and prizes in a lottery scheme That he is drawing, with persistence stout, The cod being prizes—dog-fish counted out.

Hail mighty Cod! thou monarch of the fry!
Well may the poet thy grand merits sing;
To thee the chowder owes its majesty,

The queen of dishes, sweet as breath of spring. First catch your fish—itself so proud a task—

Then let the cook manipulate the rest:

Lay off and in the onion's perfume bask,

No scent more sweet to epicurean test.

All done at last, and now let every soul.

All done at last! and now let every soul Pledge mighty Chowder in a flowing bowl.

There's one of us who's sailed o'er farther seas, And tasted dishes, served in many a clime, The most fastidious appetites to please,

Who firmly vows the whole not worth a dime, Compared with chowder, eaten on the brine,

On which the cook bestows his mind and heart, Wherein such fragrant combinations shine —

The masterpiece of epicurean art! Unlike the City sort—a feeble dish— Minus the onion and devoid of fish. Restrained and swinging at her yielding chain,
Coquetting gaily with the waves that press,
The Jennie B., contented in the main,
Waits while her masters revel at their mess.
Now stately vessels to the leeward sail,
Attracted by an instinct plainly shown,
The grateful chowder's perfume to inhale,
And loiter by, unwilling to be gone;
Bearing remembrance, far upon the wave,
Of that sweet sniff which such enjoyment gave.

Ocean engirts us almost like a ring,
With here and there a point to meet the gaze;
"High Ground" of Biddeford's a trifling thing,
Upon the horizon like a summer haze;
The "Peak" we see, an island here and there,
But showing dimly in the expansive blue,
As if of earth's dominion scarce a share,
Almost eluding the beholder's view.
The fisher boats perpetual plying keep,
And move like shuttlecocks across the deep.

At little distance o'er the billows sweep

The sword-fish captors — more for work than play;
We see their casting-spears destructive leap,
And, much attached, the "barrel" dart away.
The brave and stalwart Ocean King-at-Arms,
Whose sword may triumph o'er the ponderous whale,
Here pronely yields to unexpected harms,
And ends his being in a dealer's scale!
Had he but wisdom equal to his strength,
He'd rule the ocean through its breadth and length.

Up anchor now; the day wears on apace,

— How fleet its pace at such a season blest!—
The sun "draws water" and experts can trace
The germs of tempest in the brassy west.
Away we bound before the gathering gale;

An intervening mist obscures the sun;
With hatches closed and double-reefed our sail,
Encounter with the blast we do not shun.
Pipe up, old Boreas, with your fiercest note,
You can't scare us, old inmates of the boat.

Soon darkling clouds are pendent overhead,
And from their hydrants pour the "slanting rain;"
The sea, fast rising, as if terror-sped,
Urges its racers o'er the foaming plain.

The lightning flashes and the thunder rolls, And darkness rules the province of the deep,

But sturdy will our little bark controls,

And as the winds must sweep we let them sweep. Better, when in a strait, to be content, If we can't, any way, the thing prevent.

Lay to! No hen in her sequestered nest, E'er felt the fullness of a glad content, More potently than we in that calm rest,

While elemental spite is on us bent, With everything secure - aloft, below -

And Goldthwaite at the helm, fear cannot bide; The rains may beat, the winds their worst may blow,

We know that all is right and let her slide. 'T is comfortable, when thus shut below, If we but know just how to make things go.

The funny story first comes into play,

From one who shows a very Protean art, In whom such potency of fun holds sway,

That mirth is jubilant in every heart.

Such portraitures of idiomatic vim, - Dutch, Scotch, and Irish, Darky and Chinee -

That, listening their embodiment in him,

We half forget his own identity. Such glorious souls a wealth of gladness fling, And rob adversity of half its sting.

And tales are told of lands beyond the main,

By him, our traveller 'neath many skies: Of perils dire, and incidents a train,

That make his hearers open wide their eyes.

In silence listening — without a doubt —

He pours his mandragora on their ear, 'Till patience, overtaxed, gives wholly out,

As still he bores with a persistence drear, But soon, exhausted with his effort deep, He grows inaudible and drops asleep.

Now for a song! and one stands to obey --

A tender youth, of sentimental mien, But an apt sailor, as he's proved this day —

Who thrums a grip-sack for a mandolin.

And then he says he'll raise for us a lay (Though not a pullet) to a tender theme,

Giving himself in rapturous mood away,

Like a mashed lover in a halcyon dream; While, listening, all admit his tenor's splendor, And own his tender notes are legal tender:

SONG: THE SAILOR'S LOVE.

Darling, waiting by the sea,
With her eye of anxious quest,
Thinking lovingly of me—

Me, alone, her bosom's guest.

Waiting, waiting, Ne'er abating tender love for me,

In her tender love for me, Far away upon the sea.

Soft and low across the sea, Greet her words my inner ear, Waking a response from me

That I know her heart will hear.

Wating, waiting, Ne'er abating

In her tender love for me, Far away upon the sea.

Soon, our vessel homeward bound, I shall find her by the sea; Oh the rapture, most profound, That's reserved for her and me!

Waiting, waiting, Ne'er abating In her tender love for me,

Safe returned from o'er the sea.

"All hands on deck!"—it is the captain's cry,
And up the stairs all spring with agile feet;
The sun is chasing shadows from the sky,
The winds and clouds are off in full retreat;
The jocund waves run dancing in their glee,
As if elated at the trial past,
And now, the sails all set, the yielding sea

Feels Jennie's heel as on she hurries fast
To reach the haven by the distant shore,
And yield her crew to busy care once more.

Now the High Ground in nearer aspect looms, As by the channel's "Edges" safe we steer, We hear the wave o'er "Dancing Rock" that booms, Void of its tempest tones that boatmen fear.

The landmarks plainer show as on we press, Beneath the urgency of wind and tide,

And "Pine Point" wears a smile of cheerfulness,

As if of welcome, as we onward glide. Old "Fletcher's Neck" obtrudes, severe and grim,— His "Neck," alone,—unseen the rest of him. The more familiar scenes again are here,
As evening shadows o'er the landscape fall,
The islands faintly show and disappear,

As night descends upon them like a pall.

Now the "Pool Landing" reached, to anxious friends

We tell the story of our day's emprise,

While sweet affection to enjoyment lends

A charm that every peril sanctifies. And then we talk and smoke our mild cigar, While old "Wood Island Light" gleams like a star.

The cottage lamps burn round "Old Orchard" beach,
And all is still save the incoming tide,
Or the faint distant sound of song or speech,
As lovers walk the tranquil bay beside.
We fancy, in the hush of evening, still,

That we can hear the fall on "Foxwell's Brook,"
Or rustling leaves that sigh o'er "Laurel Hill,"
In spirit tones befit that sacred nook.

A mist arising dissipates the charm, And we retire, inside, avoiding harm.

Give me my yacht, my season by the shore,
My wife and children happy by my side,
I'll ask from Madam Fortune nothing more,
With this simplicity well satisfied;
Of course a friend or two, to help us out,
Should be included, and such little traps
As tend to comfort that we know about,
And these and other things were all, perhaps;
Then, with good sailing and sufficient fish,
I would be happy as a king might wish.

B. P. SHILLABER.

TROPICAL FISH.

IT is pleasant, when engaged in taking fish from our own waters, to have some one at hand, as is almost always the case, who has sailed over tropical seas and can tell tales and incidents of his own experience. Fish that are unknown to us, save in books, we are made acquainted with from personal descriptions, and are led, almost to longing, to extend our excursions into wider fields. tell us of the Portuguese man-o'-war, that sails on the wind in immense fleets, their tiny sails projected a few inches above the water, which disappear on the approach of a storm; of the king-fish, a beautiful and symmetrical fish, some six or eight feet long, of power sufficient, when stretched upon the deck of a small vessel, to jar the whole structure by the flapping of his tail; of huge sharks that follow a vessel for days, apparently in hope of some one falling overboard; of rudder-fish, a small and graceful little fellow, that plays about the rudder of a vessel during long voyages upon the summer seas; of dolphins that swim in great schools, hardly like the one that swam ashore with Arion, nor as beautiful as the subject of poetical tradition; and the flying-fish upon which the dolphin feeds. This last has been regarded by many a mythical creation, and we remember the story of the returned sailor, who told his grandmother about flying-fish, and was rebuked for telling

anything so improbable; but when he told her that, in the Red Sea, they had, on weighing anchor, drawn up one of Pharaoh's chariot wheels, she believed it readily, but told him never to mention such a thing as flying-fish.

The dolphins and flying-fish are every-where in the tropics, from the gulf stream to the equator on the north, and in corresponding waters south. In Curacoa they are caught and marketed as articles of food. The flying-fish is as delicious as a mountain trout, but the dolphin hardly desirable to a northern palate. The negroes of Curacoa, and the poorer whites, however, are not so fastidious, and "every thing is fish that comes to their net," even the sharks that sometime break into their nets in pursuit of flying-fish.

Taking flying-fish by nets, however, takes, likewise, all the romance and poetry out of them, whatever merit they may have as a fry. To see them on the deep in their freedom is a beautiful sight. When pursued by the dolphin they spring from the bosom of the waves like silver slivers, and with their long side fins, two thirds as long as their body, they paddle the air, just above the water, for hundreds of feet, falling into the sea beyond, probably into the jaws of the fish that has followed them. They frequently drop upon the decks of vessels in their track, especially at night, and serve as a delicious morsel for the cabin table. One night as the jib of a vessel was being furled, a flying-fish struck the sailor, who was performing the duty, with such force as to almost knock him from the boom, but he caught the fish in the loose bosom of his shirt. The flying-fish is about the size of the small Scotch herring, and resembles it somewhat in the shape of body and scales, the head being different.

The dolphin, when taken by a harpoon, bears out very feebly the claim made for his beauty. He is as ugly as a cat-fish, and his change of colors is but little to speak of; nothing, indeed, to any one but those predisposed to see

it. There is enough change, however, to commend it as a phenomenon, but the beauty claimed is humbug. The flesh of the dolphin is very dry, and the sailors prefer salt horse and hardtack to dolphin steaks.

The porpoises that play around vessels in the tropics are far greater favorites with the sailors. There is a social and free and easy way about a porpoise that a dolphin does not possess. Throw an old hat to a tropical porpoise and he will, likely as not, thrust his head in the crown and wear it down among the mermaidens as a specimen of human fashions. The porpoise is esteemed for his liver, that resembles a hog's, in taste. The good brig Alexander, of Hartford, returning from Damarara, had on board a very eccentric passenger, who ate but one meal a day his dinner—when he gorged enough for all three. would lie in his berth until nearly dinner time, reading good books, ostensibly, but the steward found under his pillow other books not so good, and then he would dress himself elaborately, even to wrist ruffles, and sit at table as stately as an alderman. One morning early a porpoise was caught and its liver given over to the cook. mate, a waggish man, told the steward to inform the passenger that they had pan-fish for breakfast, and asked him to join them. He had seen rudder-fish playing about the vessel and had expressed a wish to taste them, and here, he thought, was just the occasion. He accordingly arrayed himself with his accustomed care and came on deck, where the smell proclaimed the approaching treat. He seated himself at the table, with the most tantalizing expectation, waiting the advent of the "pan-fish." Shade of Epicurus! No sooner did the steward appear, depositing the fried liver upon the table, than the gourmand started up, almost capsizing the spread for breakfast, and rushed for his cabin where he sulked till dinner time, and never spoke to the mate afterwards during the voyage.

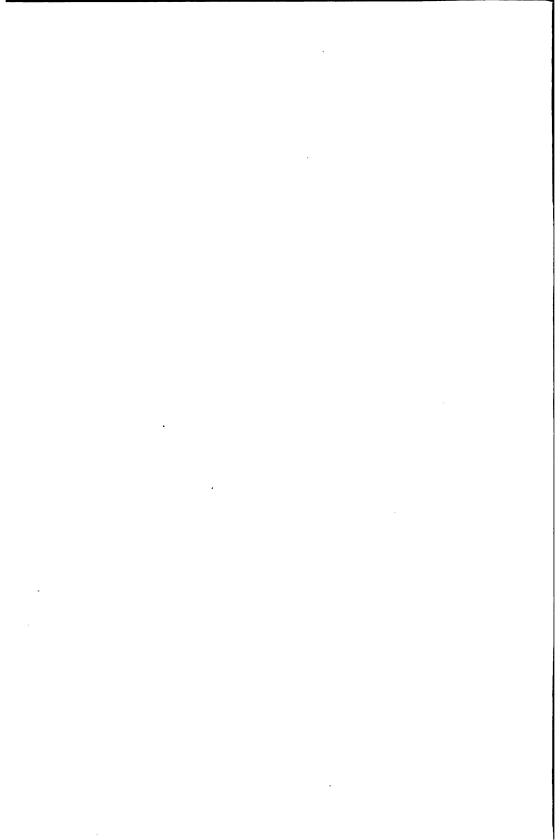
ONE OF THE DAYS.

ONE of the pleasant days passed at the Pool, during summer, may serve to characterize many, given up to the enjoyment of memory of the past and participation in incidents of the present. Thus, while the Jennie B. is waiting her departure on her accustomed errand, and the captain is making preparations for a sailing and fishing expedition out upon the deep, I quietly seat myself upon the shady side of John H. Hussey's fish-house and let my mind run back to years ago, when I first became acquainted with the delightful locality, and mark the changes that have since taken place. Very few of the people now remain who sailed the boats of long ago, but have taken that farther voyage from which there is no returning. With memory of these let me picture the present scene.

Across the stream, I see the tug-boat Jos. Baker, in her new summer dress. Paul Hussey is painting the Etta B. Rich, and soon Fred T. Brown, of New York, and his friends, will be upon the briny deep in her, with "Paul in the Pulpit," looking for sword-fish. Warren Rich, with the Eva A. Race, is just starting on a look-out for mackerel. Jotham Davis comes skimming along, noiselessly, returning from his daily trip for lobsters or cunners, and soon Henry Goldthwaite will make his appearance, after a few hours' visitation to his lobster traps; neither of whom need fear, if weighed in the



BIDDEFORD POOL, MAINE, FROM EVANS' COTTAGE, LOOKING WEST



scales, of being found wanting. Rounding the turn at the Lobster Rocks comes Johnson, the indefatigable, with a decent fare of cod-fish, and soon the quiet shore will change to a busy scene, where, for an hour or more, the fishers will be employed in taking care of the morning "catch." Though not naturally musical, the Biddeford Pool people are always ready to join in a *catch*.

All right now for the morning cruise, but the day is very calm, with scarcely a breath of air stirring, and if we succeed in reaching the fishing-grounds we shall be lucky. The captain says "Ready!" and, putting our stores and bait on board the tender, we wait the movement of the waters, or, rather, the winds, the water being well enough. We attempt to start, but there is plenty of time for a good deal more reflection than I had indulged in. As we move along at but a snail's pace, memory still rests upon the scenes of long ago. There is no escape from them in this calm. Every spot is invested with interest, made familiar by years of association. The mind, in such a mood of nature, takes its form, and we drift and dream. with pictures of former days taking shape in our imagination, embodying in many ways the life of the old Pool veterans. One prominent feature presents itself as we drift by Lobster Rocks, where, at Christopher Hussey's, I spent so many of my boyhood days. There is his house, and there is the man, in the mind's eye, as I used to see him, going towards South Point, gaff in hand and basket on arm, the red flannel undershirt revealing its bright circles around both arms about half way up. I would give a deal for such pictures, embodying the scene, and others that I recall as we move slowly on under the summer sky.

Just outside Wood Island are fourteen schooners in precisely our own condition, and can scarcely budge an inch. The sloop yacht Anna, Com. Lambert, of Boston, has just made her appearance, between Wood and Gooseberry Islands, barely moving with the action of the ebb-tide.

Soon, however, we are favored with a light breeze, and all move on like gulls upon the wing. In a little while we say "Good-bye" to the yacht, as we have already "hove to," to give the fish a try. Presently we anchor, and speedily the sky assumes a threatening aspect. The dark low clouds seem full of wind and rain. Hark! now the thunder booms over the distant land, betokening a tempest that may soon be upon us. It comes louder and nearer, till the whole concave seems aflame, and the rain descends, like a cataract, with the rising wind.

Reader, have you ever had the charm of sailing knocked out of you by a squall at sea? Only through your own experience can you appreciate our condition in the present emergency. It is really threatening a blow. We lower our main-sail, secure our fore-sail and jib, and wait the elemental war, that comes soon enough, the thunder and lightning terrific—the lightning playing all around and over us—and from several claps, simultaneously with the flashes, the streaked flame must have struck old ocean in our immediate vicinity. Luckily the storm was brief, but if those on shore could have witnessed it, as we did, they would have come to the conclusion that the floodgates of heaven were opened wide above us, filling our hearts with apprehension lest the water should fill our boat with its downpouring.

Calm and storm prompt each their peculiar reflections. The morning dream is succeeded by thoughts suggested by the tempest's terror. First comes the dread lest the anchor may not hold, then whether masts and sails may not succumb to the fury of the gale, and then what may become of ourselves if all should go. We feel a realizing sense of our position as the rain and wind are beating upon us. In thirty minutes the storm is all over and the sun beams down upon us with a more benignant expression after his obscuration, seeming to say: "You shall not be harmed. I'll look out for you."

It is a glorious sight to see old Ocean after a storm, and we must witness all its phases to realize its grandeur and beauty. We feel happy to have escaped unscathed from the tempest's spite, and every wave is invested with added beauty. The episode verified the moral quotation from Mrs. Gov. Bradstreet's poem about yachting, to be read elsewhere.

Regarding the day's fishing, the result was satisfactory, notwithstanding the unfavorable condition of things, as I carried home my baker and broiler safely. Something like the itinerant who handed around his hat for a collection, and, getting nothing in it, was very grateful that he had got his hat back again.



A SHADOW-CANOE TRIP.

FROM ANDOVER, MASS., TO BAR HARBOR, ME., IN AUG., 1880.

BY G. W. W. DOVE.

THE shadow-canoe is a small cedar lap-streak keel boat, thirteen feet long by two and one-half beam, and of about sixty pounds weight; decked over, except where the operator sits, and is propelled by a double paddle, or sails. In the bow and stern are water-tight compartments of about two cubic feet each in capacity, which render the canoe very buoyant and safe in rough water. It is yawl-rigged, and sails very well before the wind. The steering is done by means of lines leading from the yoke on the rudder to a cross-bar on a post stepped under the deck within easy reach of the feet of the operator, who sits in the bottom of the canoe.

On the trip in question some supplies were taken, such as water, pilot-bread, etc., and a good-sized portmanteau carried the necessary clothing. All these were comfortably stowed away, fore and aft, leaving the middle free for the passenger. The portable masts and sails and an extra paddle were stowed on each side of him, also a dipper, sponge, fog-horn, compass, chart, etc., conveniently near. The journey was begun on Monday morning, the 9th of August, by two gentlemen, the writer and Wm. R. Robeson, of Boston, each in his own canoe, with everything carefully stored and made fast, so that, in case of an un-

lucky upset, nothing would be lost. The start was made at 9 o'clock, from below the dam at Frye Village, Andover, Mass., on the Shawshin River, a tributary of the Merrimac.

Paddled leisurely down until 10:15, when we reached the Merrimac a mile or so below Lawrence. Rubbed pretty hard over the shallow places and rapids, running one, on which we came nearer being capsized than at any other time during the trip. The run down the Merrimac was very pleasant, with the exception of two very lively rapids, where it was rather exciting. At the principal one, a mile or two above Haverhill, government dredges were at work deepening the water, and we were very nearly nipped out of our boats by the chin, as we shot under one of the mooring cables stretched across within two feet of the rushing water. We felt all the more thankful for our escape when we saw some poor fellows drying their clothes, just below the rapids, having been capsized as they attempted to run them. They had lost everything that the boats contained, including some valuable guns. Reached Haverhill at noon, when, feeling a slight breeze behind us, we spread our "dandies" (a little leg-of-mutton sail just astern of the paddler). Soon after, the breeze freshened, when we landed, stepped our masts and hoisted our mainsails and jibs, though the latter were never of much use. mainsail is of the "lug" pattern, of about thirty cubic feet area, and is quite effective in a good breeze anywhere from abaft the beam. Lunched on board while sailing down the river. At 4:15 we reached Newburyport. Landed just above the city, stowed our sails and took a swim; then paddled down, hauled our canoes out and housed them, and resorted to the Merrimac House for the night.

Tuesday, 10th. Were off again at 9, A. M., and in an hour were out of the river and on the salt water. Passed Salisbury Beach at 10, and the Boar's Heads at 11:30. Paddled on over a gentle swell until 12:30, when we came to Rye Beach, where we landed for dinner and a rest, as

three hours of steady work was a little trying to untrained muscles, at first. After a good dinner at the Farragut House we were ready to proceed, but were detained, until quarter past 4, by a violent thunder storm, which we were quite content to witness from the piazza of the hotel rather than experience on the ocean. Tried our sails again, but made slow progress, so stowed them and paddled along the shore to the entrance of Portsmouth Harbor, where, at 6 o'clock, we hauled out and passed a very comfortable night at the Wentworth House. The distance from Newburyport to Portsmouth is, by the way we went, about twenty miles, which we accomplished in a trifle more than five hours.

Wednesday, 11th. Started again at 9, A. M., with the wind ahead. A fine sunny day, which we fully realized before night by the impression it made on our arms and backs, which became as red as a boiled lobster, and felt about as comfortable, probably, as one when boiling. 10:15 passed Whalesback light, and soon after sighted the "Nubble," a curious-looking object, not unlike a huge egg, with a light-house perched on the top of it. At York, which we reached soon after noon, we were glad to cool our heated limbs by a plunge in the surf. Had a good dinner after a hard struggle, on account of the numerous summer guests recreating there, and shoved off again at 2:15. No fair wind to-day, so had to paddle steadily, and we were not loth to point our bows in shore when we arrived off Wells Beach. Landed at 6 and made snug for A pretty hard day, with little wind, and the the night. sun beating down on us all the way. Turned in after a hearty supper, but it did not seem more than five minutes before it was morning, and we as hungry again as though we had not tasted food for a week.

Thursday, 12th. Off at 9:15 A. M. A fine cool morning without a ripple on the water. Cape Porpoise, away in the dim distance, was our objective point. To reach it we

had to cross an arm of the sea twelve miles wide. As the sky was clear and the sea calm, however, we ventured it, instead of following the coast, and, after a steady pull of nearly three hours, we were safely over. After doubling the cape we hoped to cut off another good piece, between us and Saco, by going through a creek. We noticed that the tide was pretty well out, and asked a fisherman if we could get through. "Oh, yes, with them things," was the encouraging reply. So we started in among the islands. Before getting far in, another fisherman was a little doubtful about our getting through, but was sure we would not have to wait more than twenty minutes, any way, and suggested that, if we got stuck, we could take our ships under our arms and walk over. As we should cut off a couple hours of hard work, or hoped we should, we took courage and proceeded. Soon passed another man, in a boat, who informed us that we should have to wait an hour. This did not dismay us, as he might be mistaken, The creek grew narrower and shalso we pushed on. lower, and at last there was no water at all. It did not look as though the tide would ever cover the huge rocks and rubbish that extended as far as the eye could reach; so, in desperation, we backed out, as cheerfully as the circumstances would admit. Moral: Do not fool with mud creeks at low water. We did not reach the Point of Rocks off Biddeford Pool until 2:25. P. M., and were rather drearily lunching on a bit of hardtack, when our friend, Mr. Joseph W. Smith, who, from the piazza of his hotel, had espied the two little specks out on the water, as we were passing, drove quickly down to the Point, and hailed us, and we paddled round into the harbor at the Pool, and had the pleasure of dining with him. We intended to go on immediately after, to Cape Elizabeth for the night, but as we had already experience enough for one day, there being no wind, concluded to remain where we were, which decision we did not regret, as we found we had fallen among friends.

Friday, 13th. Started at 8:30, A. M., the water still as a mill-pond, the sun shining brightly, and a gay party giving us a good send-off. At 11:30 passed Richmond Island, when we spread sails and slanted over to Cape Elizabeth, where we dined quite comfortably at the hotel. At 2:15 proceeded again, and had a fine run down to Harpswell, at the mouth of Portland Harbor, which we reached at 6:30. A fine breeze made the water quite choppy, but the little boats behaved beautifully, and we enjoyed this, our first good sail, very much. Our covers, which fitted snugly around us, and our rubber coats protected us from the water, which sometimes seemed to cover the whole canoe as she plunged under a high wave. One charm about this kind of sailing is the delightful freedom from having to retrace one's course in order to get home again before night - often midnight - as we carry our homes with us for the time being.

Saturday, 14th. Started at 8:30, A. M., though it was raining a little. The paddle across to Cape Smallpoint was against quite a head sea. Shipped a number of white caps which drenched us, since we could not paddle in overcoats, but the exercise kept us in a glow, and we passed safely over. At 11:30 passed the lonely island of Seguin, with its solitary light-house perched on its high cliff. Then came an hour of rugged work as we paddled across the mouth of the Kennebec, against wind and tide, and waves higher than our heads. If we had known what was in store for us when we started in the morning we should not have left Harpswell so willingly. After fairly getting off, however, there was no turning back, as we might have been swamped in attempting it. But I do not consider that we were in any particular danger so long as we could keep head on to the waves and make any progress, as our buoyant little canoes, completely covered in, shed the water quickly and safely. They required all of our attention though, and we did not idle much until we were safely over, and in behind a sheltering island, where we stopped at I o'clock for rest and lunch. Got into some dry clothes and shoved off again at 2:30, bound for Mouse Island, some fifteen miles distant. The wind had gone down, and so we had to rely upon muscle alone. At 4 we were off Old Harbor, or Cape Newagin, rejoicing that the roughest part of our journey was well over. Rain troubled us not a little, and at one time we stopped under an old fishhouse, built on piles, and let it pour for a good hour. It was a leaky shelter though, and reminded us of the Shakspearean gaberdine. But it was getting late and we had to push out into the shower and make the best of our way to Mouse Island, which we reached at dark, and, hauling our canoes above high water mark, we sponged out the little water that had stolen in - expected to find much more put on the covers, locked them up, and, with our portmanteaus, walked up to the hospitable hotel for Sunday. We changed our wet clothes, had supper, and slept in a closet, which, however, we did not mind a bit. I believe we could have slept on a picket fence, though of course we were thankful that we did not have to try.

Sunday, 15th. Rested — that is, most of the day. We considered it a work of necessity to take a run up the river to Boothbay to dry our sails, there was such a drying breeze! — but we did not continue our journey until

Monday, 16th, when we shoved off at 8, A. M. Quite a party saw us start, in our good clothes, and waved to us, with good wishes, until we were out of sight around the first point; then we landed and got ready for work. Outside found a strong breeze blowing, to which we hoisted our sails. The little masts bent under it, and we bowled along at an exciting pace, our little sharp bows cutting through the water like a knife. The sea was quite smooth, our course being behind sheltering islands most of the way. At 10:50 rounded Pemaquid Point, where we were tossed about a little, but we could stand anything after the Ken-

nebec river experience. At Marshall's Island we dined at I o'clock, a pail of nice milk from the lighthouse helping us out. Another sail of four hours, past the beautiful Camden hills, brought us to the Musscle Ridges, with the finest breeze behind us we had yet felt. How we did skim over the water! At 8:30, hauled out at Owl's Head for the night. We expected to sleep at Tennant's Harbor, but learned that the only hotel there had been burned. With the tide in our favor it was no hardship to paddle on a while, after losing the breeze with the sun. The last five miles were made under a bright moon, which was a very pleasant novelty. Progress, to-day, thirty-two miles.

Tuesday, 17th. Were delayed in getting off by my companion's steering geer being out of order. A little box of tools, which formed part of our outfit, enabled us to repair the damage, and at 8:30, A. M., we paddled away for the North Fox Island, which we reached at I o'clock, and dined upon our pilot bread and milk. At 2:30 our afternoon breeze brisked up again and carried us flying to Eagle Island, where we put up at the lighthouse for the night.

Wednesday, 18th. Our next stop was to be at Southwest Harbor, Mount Desert Island, the blue mountains of which we could just see in the dim distance from the lighthouse. Paddled up the bay, with our dandies set, in an hour and a half; made seven miles, and entered Egamoggin Reach. The steamer Lewiston, from Mt. Desert, gave us a friendly "toot" as she passed us, her passengers craning their necks at us as though we had been the sea serpent. A brisk breeze was blowing against us. At 1:20, P. M., bread-and-milked on the end of Pond Island, and resumed our paddles again at 3 o'clock. Southwest Harbor, with a stiff northeast breeze and a bay full of white caps between, was twelve miles distant, but there was nothing to do but to push on, though we had been working hard since morning. At quarter past 5, passed Bass Harbor light without

accident, which we considered good time. Tried our sails on changing our course a little, but, not making satisfactory progress, clewed up and paddled round to the harbor, not reaching there until past 7, after a hard day's work against the wind all the way. Supper was over at the hotel, but the good-natured deacon had a steak cooked for us, which we immediately swallowed and called for more. Our appetites were not entirely appeased until about 9 o'clock, and then we had to hunt up a bed, every room at the hotels being full. We got through the night somehow. I know we slept soundly and breakfasted heartily. Paid our one dollar each cheerfully, wondering if the good deacon made any money out of his summer boarders, especially canoeists, and at 10, A. M., bore away for Bar Harbor, the end of our journey, which we reached at 2 o'clock, having made two hundred and seventy-five miles in our jolly little boats, in ten working days of about seven hours each. The pleasure of our trip was such that we really felt regret that it was so soon over.



PHENOMENA OF THE SEA.

CURRENTS, winds, light breezes, calms, fogs, etc., afford a constant study to those who live beside the sea, or who have a home, or do business, upon its waters, and elaborate scientific treatises have been written upon them for general instruction. Rare opportunities are afforded at Biddeford Pool for witnessing these phenomena in perfection, and its harbor presents a safe retreat to those endangered by them. With Portland Harbor twenty miles to the eastward, and Portsmouth forty miles to the west, the Pool becomes very desirable as a safe resort, when adverse winds, squally or thick weather, and fogs prevail, as is quite commonly the case on the coast—especially in July and August, when the yachtsmen are out, who find in the Pool Harbor a safe shelter, remaining until danger has passed. The mackerel fleet, on their passage to the east, or vice versa, congregate, when hostile phenomena occur, inside of Wood Island for a harbor, and large vessels at times seek shelter for the same reason. If one were to keep a record of all the interesting occurrences relative to the subject of this chapter, during the year, it would present a very amusing and instructive whole that would be pleasant to scan. The freaks of marine phenomena here are so frequent in their varied phases, that they are merely noticed for a moment and forgotten, or, if remembered by

some, more observing than most others, are only used to adorn a tale, illustrating some incident at Biddeford. Relevant to this topic of phenomena of the sea, is presented a chapter from a work by Dr. James R. Nichols, of Haverhill, by his kind permission, regarding the "Chemistry of the Sea," that will be found both pertinent and attractive:

CHEMISTRY OF THE SEA.

From "Chemistry of the Farm and the Sea," by James R. Nickols, M. D., who has kindly permitted its insertion here.

While standing by the shore of the sea, contemplating its solemn grandeur, and reflecting upon its mysteries, we are apt to overlook some of the interesting and wonderful facts connected with its chemical history and character. It is natural that what is palpable to the eye, and so well calculated to awaken sublime and poetic emotions, should overpower the desire to study the "hidden things" of God, as connected with the great deep. It would be difficult at the sea-side to obtain listeners to a lecture upon the chemistry of the sea; but I venture to assume that under the less busy and exciting circumstances of home, the topic will not prove devoid of interest.

That which usually first arrests the attention of visitors to the sea, is the bitter and saline character of the waters, and the inquiry is made, From whence arises this remarkable condition? It may be said in reply, that it is but an exaggeration of that of ordinary lakes, and rivers, and springs; the same materials exist in them, only, in most instances, in infinitesimal quantities. As the atmosphere is the grand reservoir into which all gaseous or vaporous bodies pass, so the sea is the vast receptacle into which all the soluble substances washed from the earth are deposited. All kinds of soluble matter, washed out by percolating

rains, descend to the ocean, by the agency of brooks and rivers; and as there is no outlet, no streams running from it, to carry them away, and as in the process of evaporation they are left behind, these soluble salts and minerals have been accumulating for ages, until they form prominent constituents of the waters. All bodies of water on the globe, into which rivers flow, but from which there is no outlet, except by evaporation, must necessarily be salt lakes. The Great Salt Lake, in Utah, that of Aral, near the Caspian, and the Dead Sea, in Judea, are remarkable examples of this kind. The Utah basin is filled with a saturated solution of this substance. This excessive saline condition is probably due to the existence of large bodies of salt in close proximity, or somewhere within the reach of streams that flow into it. Chloride of sodium, or common salt, is one of the most abundant of all the soluble substances found upon our earth, and consequently it predominates in sea waters. But while it is the most abundant and perhaps the most useful, it is by no means the only valuable substance carried into the sea. In quantity, next after salt, come certain combinations of magnesia, next, salts of lime, the carbonate held in solution by excess of carbonic acid, then small quantities of potash and oxide of iron, and lastly, a trace of a most remarkable elementary body - iodine.

It seems a trifling and unimportant matter, this trace of the latter substance in sea water. The quantity is so infinitesimally small as scarcely to be recognized by chemical tests even after condensation by evaporation. Prior to the year 1812, this element was unknown. It was not found in plants, or rocks, or earths, or springs, in quantities appreciable to the chemistry of the last century; and even now we only know that a few atoms exist in the little watercress, and a few other aquatic plants, and in some springs and rocks; but from none of these sources could, probably, a single ounce be obtained. By the solvent

power of water the minute quantities found upon the earth are taken up and deposited in the sea; and the Creator, as if foreseeing that this substance would be required in the arts to be cultivated by man, has provided a way by which it may be secured and appropriated to his purposes.

But before dwelling more particularly upon iodine, let us return to a brief consideration of the uses in sea water of some of the other soluble constituents. Everything in nature certainly has some palpable use. It is no accident or casual circumstance that the sea contains large quantities of the lime and magnesia salts. What stupendous results flow from this soluble carbonate of lime! Without it where could shell-fish procure their coverings, or the coral polyps the material for their curious structures? The shell of the clam, the oyster, the snail, the lobster, etc., is composed almost wholly of carbonate of lime: what source do the fish obtain their calcareous coverings? Young oysters in two or three years acquire a size suited to be used as an article of human food. The little gelatinous speck floating in the water at birth has through some channel obtained two or three ounces of solid stone armor in the short space of thirty or forty months. It had no power to chisel it from limestone cliffs, and they are not always found in the vicinity of calcareous deposits. It has absorbed or drawn it from the water in which it moves; no other source supplies it. How immense are the beds of shell-fish upon the shores of the ocean! What a vast concentration of the lime, once held in solution, is effected by these feeble creatures, ranked among the lowest in the order of animated creation!

But still more wonderful is the work of the coral polyps. The geologist and the navigator will readily appreciate the extent to which the surface of the globe has been altered and modified, both in ancient and modern times, by the silent labors of myriads of these creatures, all engaged in the production of calcareous matter. The whole peninsula

of Florida has been manufactured out of sea water by the little polyps. We are indebted to them for our marble houses, tombstones, and mantel-pieces. Powers's Greek Slave, pronounced by admirers of statuary to be "instinct with life," was probably once so in an actual rather than poetical sense. The marble is made up of the relicts of these animals; and if from comminution they are not apparent to the eye, the microscope will show them. It is probable that nearly if not quite all limestone rock, in whatever form it is found, is of animal origin, and produced from the waters of the sea.

We now understand how vast quantities of lime are removed from sea water by the agency of living organisms: it remains to notice the channels through which iodine is separated, and placed in our hands for use in medicine and the arts. Human industry and science could never separate this element from sea water in any considerable quantity, and the power denied to man has been bestowed upon a slimy, repulsive weed. It is fortunate for us that the deep-sea plants have had conferred upon them a strange appetite, and that the food they seek is in part the sparsely disseminated atoms of iodine. It is probable that this constituent of sea water is in some way connected with the well-being of submarine vegetation, and that it is indispensable to its growth.

Through what feeble agencies stupendous results are attained! The little polyps build reefs and islands; the seaplants (which every wave tears from their rocky homes), with their millions of open mouths, suck from the surrounding waters and appropriate as food tons upon tons of substances, otherwise unobtainable, and without which one of the most beautiful and important arts could have no existence. Seawood possesses the remarkable power of abstracting from water, iodine. Let us inquire by what process of chemical manipulation it is forced to disgorge its precious treasures.

All deep-sea plants are more or less rich in iodine; but the Palmata digitata, that leather-like and greasy weed, with long round stalk and wide branches, has it in greatest abundance. The Irish call it tangle or lieach, and it is found strewn along our shores in large quantities after storms. But even this holds but a very small quantity. Every ounce of iodine upon the shelves of the apothecary has required at least four hundred pounds of weeds in its production. About thirty tons of the wet plants give one ton of kelp, as the incinerated mass is called, and from this nine or ten pounds of iodine is obtained. This would seem to involve a prodigious amount of labor and expense, bringing a high price upon the products. But the price is exceedingly moderate, seldom ranging in the English market above three dollars per pound. It would never pay at such prices to manufacture if the weeds did not yield other valuable products, as potash and soda. Without stopping to consider in detail the production of these salts, it may be interesting to know that probably more than four thousand tons of potash and two thousand of soda were introduced into the English market the past year, through the burning of sea-plants upon the coasts of Scotland and Ireland. The entire products of iodine from all sources must reach nearly or quite five hundred thousand pounds. How great is the industrial value of that which seems the most repulsive and worthless of all the products of nature! To what science are we indebted for opening up this great source of wealth? The reader's reply may be anticipated, — Chemistry.

The first work in the process is to collect the plants; they are then spread upon the ground and dried. Raked together in heaps, they are placed in rude kilns, made of beach stones, and burned. The red mass of ashes is stirred until it cools into a hard cake, called kelp, and is then ready for market and the interesting manipulations of the chemists.

The chemist breaks up the kelp into small pieces, puts it into immense tanks; pours on water, and leaches, until everything soluble is secured. He then evaporates the lev. and removes the different salts in the order of their solubility. First, sulphate of potash begins to crystallize; and that is removed while hot: as the liquor cools, the chloride of potassium begins to appear in beautiful white crystals; and that is removed. The ley is again boiled, and soon the soda salts appear; and they are removed: and now comes the iodine. If we commenced with sixteen hundred gallons of ley, we have reduced it to one hundred by evaporation and removal of the soda and potash salts: this holds the iodine in the form of iodate of soda and potassa. We must now free the iodine by taking up the soda and potassa (which it holds in combination) with sulphuric acid; accordingly, we add until it is saturated, and then we remove the yellow liquid to a style for sublimation. By the addition of heat the iodine is volatilized, or rises in vapor, and distils over into earthen receptacles, where it is condensed, and the process ends.

How often at the sea-side do we notice the disgust with which visitors thrust aside the slimy weeds, left upon the beach by the receding tide! It is probable that most carry about with them the photograph of some dear friend which they regard as a precious keepsake; unconscious, indeed, are they of the connection which exists between the light picture carried in the bosom and the marine plants trodden beneath their feet—a connection so intimate, that without the latter the former would probably be unknown. Iodine and its combinations form the basis of the photographic art; and this still resting undisturbed in the vegetable organisms, the splendid experiments of Daguerre would have been miserable failures.

BIDDEFORD POOL, MAINE, FROM THE SOUTH-EAST.



THE TIDES.

Capt. Harrison Goldthwaite, who for many years has been a pilot on Saco river, and is at present Captain of the steam tug Joseph Baker, which is the only tow boat on the above river, has kindly furnished some facts relating to tides. When the sun crosses the line in March, the night tides relatively increase with the increase of the length of days until the longest day in June, when the disparity of the tides is greatest, showing an increase of 24 to 30 inches. As the days decrease in length the difference of the tides steadily decreases until the sun crosses the line in September, when they become equal. After the September equinox, the change in the tides is exactly opposite from March to September, the day tides being the highest; the greatest difference occuring during the shortest days in December. The fact of the moon's effect on the tides is conclusive: for when the moon runs the highest we have our highest tides, and when the moon runs lowest we have our lowest tides. When the moon quarters, if it is in apogee, it gives our very lowest tides. on the full or change, it is in perigee, we have our very higest tides. If the moon perigees on the quarter, the tides at the longest days are nearly as high as when it apogees on the change. Consequently, the effect of the moon on the tides is very apparent. The mean flow of the tides at Biddeford Pool, as given by government survey, is 83/4 feet. On September 28, 1884, the tide at the Pool by actual measurement, flowed 5 feet 8 inches, with no local cause to affect it. The moon at that time apogeed on the quarter. A perigee near the quarter will give the mean flow of the tide.

A RHYMED RECORD.

THE following account of a cruise in the sloop E. Lawson, Capt. Frank W. Goldthwaite, of Biddeford Pool, describes so graphically the details of yacht life, and is so associated with pool experiences, that it finds a befitting place in these pages, by permission of Capt. Goldthwaite, now of the Jennie B., to whom it was dedicated by the author, Major Alexander W. Pearson, who is likewise the author of the romantic sea idyl in another part of this volume.

CRUISE OF THE E. LAWSON.

"FISHER'S HOTEL,"
BOOTHBAY, MAINE, September 11th, 1868.

Two days ago, September 9th, we merrily set sail From Biddeford, on the coast of Maine, to try and catch a whale. Along that stern and rocky coast we cruised throughout the day, And moored our sloop at sunset in the harbor of Boothbay.

Hungry and wet, and tired too, from off the ocean's swell, We fishers found a resting place at Fisher's good Hotel: Whose table's spread from foot to head with all that's good to eat, Whose soft and downy beds invite refreshing slumbers sweet.

We dried our clothes, we supped, we smoked, but ne'er a drop of grog; We went to bed, we slept, we woke, and — all around was fog! The winds were hushed, the sea was still, the clouds hung low and dark; And soon the rain began to pour on our devoted bark.

All day it poured, we almost swore, alas, 't was all in vain! Our invocations could not bring the sun to shine again. From this dark place he hid his face and sank at last in night To bed, while we looked out to sea and sadly wished for light.

Next morning came, 't was still the same: Oh, for the bright blue sky! Oh! with the fresh and joyous breeze across the surge to fly! Oh! for the sunlight and the gale! Hurrah! the rain is done! Hurrah! 't is noon, and from the clouds bursts forth the glorious sun!

Quick! set our sail! the breeze may fail! Away, across the sea! Over the blue and boundless deep, our thoughts and souls as free! Blow, O ye winds, and crack your cheeks! and in a little while We'll land our swift and gallant bark at stern "Monhegan's" isle.

Farewell, Boothbay! another day, in sunshine or in rain, We trust our smooth and gliding keel may touch thy shores again. Farewell, ye hardy sailor men who cruise this stormy sea, The navy's pride, the nation's hope, the bulwark of the free.

SIX HOURS AFTER.

Thank God! we're back! We've tried the track across the placid seas! With eager sail we wooed the gale; alas, there was no breeze! Far down the bay upon our way we gazed toward the shore: Soon to return, our wishes burn, we needs must pull the oar.

Oh, fickle wind! why can't you find a little time to blow?
Why don't the breeze rush o'er the seas and make the "Lawson" go?
'T is awful dull an oar to pull along this lazy water!
There's no romance in such a dance with grum old Neptune's daughter!

Once more on land, we greet the strand we gaily left this morning, And blame our eyes that in the skies could see no signs of warning! We meet our landlord's smiling face, and, well as we are able, Forget our woes, while seated close beside his genial table.

Soon safe in bed, this weary head will dream that on the morrow The sun's bright rays the fog may chase, and with it drive our sorrow. To all good-night, till morning light! As still and slow are creeping The hours along, we'll cease our song, and rest the muse while sleeping.

SEPTEMBER TWELFTH.

'Tis morn, and over town and bay
September's fog hangs cold and gray.
I rub the sleep from out my eyes,
And gaze around in mute surprise.
Where is the Sun? Oh, tell me where!
Where is the bright-blue sky?
In the dense fog before me there,
One scarcely can descry

Those tall and tapering masts which gleam Reflected from the glassy stream!
The languid sails hang o'er the deep;
The very air seems fast aleep;
And neither breath, nor sound, nor motion Disturbs this smooth and tranquil ocean,
Whose calmly dark and silent breast
Seems typical of endless rest.

I step down to the "Lawson's" side,
To see if on the rising tide
Her graceful keel is yet afloat:
What do I see? It cannot be!
Some fiend has stolen our boat!

SEPTEMBER TWELFTH --- AT SEA.

When, while ago, I ceased my song, My soul was filled with sense of wrong. Some sailor of the mackerel fleet, Some rascally wretch whom I'd like to meet, His lazy carcass from shore to ferry On board of his ship, had stole our wherry! 'T was no true sailor! That could not be! Those daring conquerors of the sea Who over the ocean in victory Have borne the flag of the brave and the free-Th ere cannot be one of them but feels How vile a thing is the wretch that steals! 'T was not a sailor! I've stood by the gun, When the fight was past and the victory won; When the deck was soaked with the crimson flood Of our slaughtered comrades' well-spent blood; While the curling smoke of the bursted shell, Whose rending crash was the seaman's knell, Still hung festooned in the transom's shade, And over the shattered port-hole strayed. I've gazed on the faces of those around, Of the sailors who yet had escaped a wound, Who sternly stand where their messmates lie, And look that they mean to conquer or die; I've gazed on those faces, all powder and grime, And thought, "Can such men commit a crime?" Those tars who for years have been rocked to sleep On the heaving breast of the boundless deep,— Who have seen with awe the Almighty's form Mirror itself on the front of the storm,-Who, summoned on deck by the thunder's drum, Calmly await that the tempest may come,

And with steady nerve, and with fearless eye,
Watch the red lightnings cleave the sky,—
Who, far on those wastes that no foot has trod,
Have almost seen in the face of their God,—
Who have met the broadside's reeling rack
With a shout and a cheer, and dashed it back,—
Who in battle's roar, in the whirlwind's blast,
Proudly lash themselves and their flag to the mast,—
The American Seamen! Oh, who too well
In his honor can speak, of his fame can tell!
No, 't was not a sailor! I take it back!
That "bounty-jumper" who stole our smack
On yesterday night, could only have been
Some "pitiful cuss" of a "hoss marine!"

We took a pull through the mackerel fleet,
Hoping our wherry by chance to meet;
And soon, by a rakish schooner's side,
Far down in the harbor, we found her tied.
The skipper said that at early dawn
He saw her adrift and to save her had gone.
Whether 't was true, or whether he lied,
Was a question we could n't just then decide:
For truth's dear sake we gave him a "quarter,"
And towed our skiff home o'er the shining water.

Ah! now it breezes! The glorious day Has driven the fog and the clouds away! Up, up with our sail! Ere the sun has set The Lawson may glide to Monhegan yet! Swift as the sea-gull, our vessel brave Is flying along o'er the joyous wave! She bounds on high on its foaming crest! She plunges her prow in its briny breast! With a graceful toss of her head, away She playfully dashes its glittering spray, And stoops to the kiss of the eager tide, As its waves stretch their hands up to clasp their bride! Sail on, my beauty! My darling, sail on! With the speed of the dolphin, and grace of the swan! No lovlier image of beauty than thee Ever beamed on the breast of the beautiful sea!

Afar on the dim horizon's verge, Where the bending skies from the deep emerge, Where the crimson clouds and the waters meet, See the slender spars of the mackerel fleet! They are sounding the depths of the ocean world! Topsail and foresail and jib are furled: With mainsheet aft and with helm alee, They are "lying to" on the bright-blue sea, While with busy hook and extended seine They are seeking their finny prize to gain.

Now the breeze fails us! 'T will blow no more! We must tack our sloop for the distant shore! Now it dies away calm! There's no longer a breath! And the ocean grows glassy and still as death. See! see! from seaward the fog bank creep! It spreads its pall o'er the breathless deep! We must pull for the harbor while yet 'tis light, Or sleep in its clammy shroud to-night.

Now we bend to the laboring oar! Lazily, wearily!

Mournfully, drearily!

Joy! The breeze kisses our sails once more! We slacken the sheet,
The light zephyrs to meet,
Steadily northeast by east we steer;

If the wind will but stay
Till the close of the day,

With our truth-telling compass, we've nothing to fear! We pantingly list for the surge's roar,
As it bursts in foam on the rock-bound shore.
"Breakers ahead!" comes the thrilling cry!
"Hard down with the helm!" is the quick reply:
And our "darling" gracefully swerves from her track,
And comes to the wind on the starboard tack.

And comes to the wind on the starboard tack.

Now the fog lightens! We see the sky!

May we make our port ere the day shall die!

What's that looming up on our starboard bow?

It is Squirrel Island! I know it now!

And there, ahead, is the harbor's light,

To guide us to safety; we're right! we're right!

Soon through the anchored fleet we glide!

Soon to her wharf is the Lawson tied!

Farewell to-night to the watery main!

We are snugly at rest in Boothbay again.

SEPTEMBER THIRTEENTH - SUNDAY.

'Tis Sabbath morning, the sky is bright; The fog has gone with the shades of night. Over the bay, and on the town, The autumn sun shines sweetly down, The Lawson rests on the limpid deep, Her sails are furled, and the wind is asleep. Rest, rest, till to-morrow, my beauty! and then Thou shalt bear us afar on the ocean again.

SEPTEMBER FOURTEENTH --- AT SEA.

Hail to the day! the glorious day! The sky is bright, and the wind is free! Spread our sail to the gale, and away, away Let us speed o'er the sparkling sea! How joyous and brightly the ocean smiles! The waves laugh in glee round the dimpling isles. How they clingingly creep up the pebbly strands! How they leap o'er the breakers, and clap their hands, As they climb up the cliff there whose rugged form Is their sport in the calm, and their wrath in the storm. O ye who have never yet sailed on the sea, Ye know not in truth what it means to be free! Ye may rove in the forest, or climb on the mountain, Or glide o'er the river, or lave in the fountain, Or bound o'er the prairie in chase of the deer, And think you are happy, - but never, oh, never, Should the thread of life's joy be extended forever, Can you feel the wild thrill of ecstatic emotion That is breathed in your breast from the breast of the ocean, As over its billows you proudly career!

Now we spring up the steep
Of the hills of the deep,
And float on the foam of the crested wave!
Now we breathlessly glide
Down its emerald side,

To the gaping gulf of an ocean grave.

But from topmast to keelson "our darling" is strong,

And as light as she's swift, or the length of my song

Would be short as that "lay of the Wise men of Gotham,"

Who cruised in a bowl, and who went to the bottom.

True, the rhyme doesn't say so; and some may dispute

The conclusion which "Mother Goose" deigns not to state

The conclusion which "Mother Goose" deigns not to state; Still, I boldly defy all the world to confute

The assumption that such was their probable fate.

The gale has wafted us far from shore; Alas, it is gone! We're becalmed once more, On Atlantic's broad bosom we helplessly lie, And gaze at the coast with a hopeless eye, While a mile to the leeward, off south by sou'west, All the mackerel fleet, like ourselves, are at rest; Like a great flock of swans, see those five hundred sail, With their white wings stretched, lazily waiting the gale.

"There she blows!" Where? See there, see that column of spray! In his measureless home see the monster at play!

Quick! the boat! the harpoon! We may catch him asleep!

Shall we dare to approach the grand king of the deep?

Should our wherry be caught by the sweep of his tail,

That he is a whale he might make us bewail.

See, there! see, he sounds! With a snort and a roar,

He has plunged to his depths, and we see him no more.

We scan the smooth ocean in search of the prey,
For whose capture we've longed through the whole of the day.
I climb to the top of the tapering mast,
At the throat of the mainsail I lash myself fast,
And sweep with my spy-glass the waste of the sea,
Still hoping the fin of a sword-fish to see.
With the roll of the billows I swing and I reel;
That I soon shall be sea-sick I suddenly feel;
On the smooth shining ocean there is not a speck
To be seen, so I gladly return to the deck.
And lazily yet,

Still we heave and we set;
And we roll and we splash
In the surge with a dash;
And the jib, with a flap, gives the mainsail a slap,
Which requites the rude blow with a terrible clap;
And the mainmast alone gives a creak and a moan,
And the rudder responds, with a squeak and a groan.
"We're becalmed! we're becalmed!
If we ain't, I'll be—hanged!"

Ah, if there's one phase of the glorious sea,
Of this royal old ocean so blue and so free,
In whose favor no word can be stated, I am
Very sure in my mind that that phase is a calm!
But see! to the eastward that dark-blue line!
'T is a light wind curling the ocean's brine!
'T is coming! our sail
Feels the kiss of the gale,
And our "darling" awakes with a start and a thrill;
She has long been asleep
On the breast of the deep,
But she's eager to bound o'er the billows still.

Now we gently glide O'er the darkening tide; The night has come, and the sun has set; But the stars will arise, And the glittering eyes Of "Orion" and "Venus" will light us yet. By Astarte's dim light, See, the land heaves in sight! On the wild waste of ocean no longer we rove; We double the cape Of Ram Island, and shape Our course for a harbor in Mackerel Cove. Down mainsail and jib! Let go anchor! we'll stay Here all snugly and safe till the dawn of the day. See! there on the bank shines the light of a store! For a shelter we'll seek! Launch our boat! Pull to shore! From our oars, as they splash, See the waves, how they flash! Our track through the water is marked by the light Of the phosphorus gleam, As it shines in the stream. Like a million of stars in an ocean of night! Look! down through the jet Of the deep, see that net! Each cord and each mesh is embroidered with fire! 'T is a sight that a landsman can never forget, A wonder a sailor may always admire.

Did you ever go "phosphorus hunting" at night, On the beach at the "Pool" when the waves were bright? When the breakers, curling along the strand, Burst in floods of stars on the sparkling sand, And the dark-browed billows advance and retire, Their glittering crests each a plume of fire, -When the world around is entranced in sleep, Soft tones seem to breathe with the breath of the deep! Low, murmuring sighs o'er the waters roam, Sweet sobs from some love-lorn mermaid's home. Go then to the sea-shore! But go not alone! Have two other bright orbs by the side of your own! Gaze deep in their depths, and you'll see with surprise How the "phosphorus" burns in the light of her eyes! In fact, it is said there is not any use To "go hunting" alone, you your time will but lose: But stray on the beach by the side of the fair, And you're morally sure to find "phosphorus" there.

In fancy I sit, of a summer night, On that beach, by the side of a lady bright. Her hand is chained, but her heart is free As the wind that roams o'er the trackless sea. I see each thought of her spirit rise In the liquid depths of her hazel eyes; I hear her tone's low music swell As sweet and soft as a silver bell; And bright, as the moonlit waves that roll Their gems at our feet, is the glance of her soul. We dream not of love. It would be a crime With such feelings to sully this holy time. There is nought of earth on that gentle brow!--The stars of heaven illumine it now, And the purest of heaven's emotions trace Their lines of light on that angel face. We muse of the poets, and Milton's strain Sounds its solemn chords in our ears again; We watch the light clouds as they pass the moon, And think, as they pass, so will pass too soon The tranquil joy of this happy hour, That holds us tranced in its magic power. We sailed that day o'er the placid wave, -We had watched the sun to his western grave, -We had seen the tints of the summer even Grow dim on the azure arch of heaven, -And felt, as we gazed on the fading sky, How beauty, and life, and light must die. We spoke not then, but her lily hand As she silently gazed on the starlit strand, Trembled in mine, and it seemed to say All that was left unsaid that day. Ah, lady! if thou shouldst remember yet Those happy hours which I can't forget, In some future turning of life's long lane, I'll bet the "peanuts" we meet again!

But enough of this sentiment! Let us go back
To the place where our wherry was cleaving her track
From our sloop to the shore, where we went, as I said,
With the hope we might find in some shanty a bed.
'T is sad to relate that our search was in vain.
We must "come back to roost" on the Lawson again!
In the bunt of the mainsail we mournfully creep,
And without bed or blankets endeavor to sleep.
Through the night, in our shelter we shiver and sneeze,
For canvas serves poorly to keep off a breeze:

Toward morning, the captain, half frozen, peeps forth, And thinks that the wind's to the "no'th'ard of north."

Now up with our anchor! And as the gray dawn
Sheds its light on the ocean, the Lawson speeds on.
Far away to the eastward the radiant charms
Of the morning are spread from Aurora's bright arms.
See that flushing of crimson, and purple, and gold,
As the gates of the sun their bright portals unfold!
See those clouds in the west! how they change from their gray,
And blush 'neath the glance of the god of the day!
Lo! He comes! and away flee the shades of the night!
The foam-crested billow is crowned with his light!
Lo! He comes! Like a conqueror, glorious and free,
And full-orbed in his splender, he springs from the sea.

The sky is bright, the breeze is fair,
Our mainsail flowing full and free!
O Neptune! Grant our humble prayer,
That we in Portland soon may be!
Two hours glide past,
Our sloop's tied fast
All safe and snug at Portland pier;
Let's step on shore—

Till we have had some breakfast here. Refreshed, we rove around the town To "see the sights," and then come down And get the Lawson under way, Straight homeward bound for Saco Bay.

We sail no more

Swiftly out of the harbor we glide:

To double the cape shall we dare to try?

The wind is meeting the ebbing tide,

And the waves are running infernally high.

Ah! those who only have cruised the sea
With a summer breeze, and an easy sail,
Know little how savage old Ocean can be
When lashed into wrath by an autumn gale.
With headlong race
How the billlows chase
Each other in wild pursuit and flight;
How their foam-crests toss
Their white plumes across
The whirl of this watery field of fight.

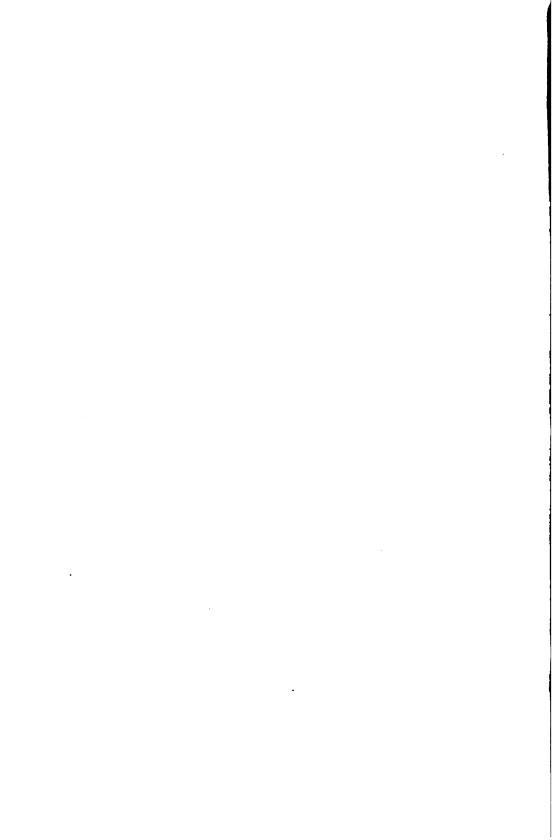
See the dash, hear the crash of the surges' roar, As they rush in their rage up the rugged shore! In a desperate endeavor
Now, now to sit, or never,
On high on the sea-girt rock,
Who from his hoary crown
Proudly casts the stormers down,
But trembles to his base at their shock.

Rolling and plunging, we struggle yet! With a dread that we dare not speak, We see that the Lawson's hold is wet. Can our vessel have sprung a leak? Quick! quick to the pump! Put the helm hard down! Let us tack, if we can, and return to town. Will she come to the wind? Will she go in stays? If she don't, 't is the last of the Lawson's days. Ah! she minds her helm! She is falling off! She buries her breast in the ocean's trough! She shakes herself free from the grasp of the wave! She feels she has us and herself to save! With a start and a shiver she bounds on high! Sail and mainmast quiver; she seems to fly! The eager billows pursue in vain! She is safe under lee of the land again.

We lazily wander about the town, And wait, till the gale with the sun goes down. The tempest subsides with the day's decline, We are gliding once more on the heaving brine. Past the forts in the harbor, the light-house past, Elizabeth's Cape we have reached at last. And, ere the sun in the glowing west Has sunk in his crimson couch to rest, With an easterly breeze, and a bounding sea, We have Richmond's Island under our lee. And now, as gather the shades of night, See the flashing gleam of Wood Island light! Which points the course that our sloop must steer, And shines o'er the waters, our way to cheer. The waste of ocean in gloom is wrapped, -Each frowning billow with foam is capped, -Darkness and silence are on the deep, -And I muse, as our course to the light I keep: How many who sail o'er life's troubled sea Have no beacon to tell what their course shall be! From the cradle of birth, to the door of the tomb, They wander benighted in hopeless gloom.



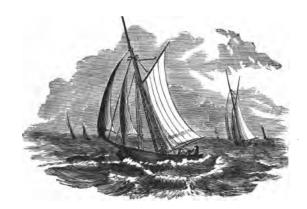
WOOD ISLAND, MAINE, ENTRANCE BIDDEFORD POOL HARBOR.



Ah! why can they see not the gleam of that light Which will lead their lone way through eternity's night? The Light-House of Ages! It shines from afar, Unquenched, and undying! Bright Bethlehem's Star! O Father in Heaven! Please grant we may see That its radiance was given to guide us to Thee!

The breeze has refreshed! Our bending mast Seems to point to the shore we are nearing fast. Wood Island is down on our larboard bow, — We see the lights in our village now. Down mainsail and jib! We are close to shore! We clasp the warm hands of our friends once more! Farewell! on the ocean no longer we roam; Our story is finished. The "Lawson" is home.

BIDDEFORD POOL, Sept. 22, 1868.



A HOME-MADE PILOT.

THE nautical skill of our shore fishermen, and their knowledge of dangerous localities along our coast, are illustrated by the following:

A SEABROOK MAN SAVES A STEAMER.

It was Willard A. Fowler, son of Richard Fowler, of Seabrook, who went to the rescue of the English steamer Wetherby, on the morning of the 20th of March, 1881, lost in the fog off Salisbury Beach, and it was only by his thorough knowledge of this section of coast where the steamer lay that a third and fatal disaster was averted, like unto the one off Vineyard Haven, and the second off New Brunswick. The section of coast where the Wetherby ran on, and the Sir Francis was lost in 1873, comprises some five hundred acres of ledge. The steamer ran completely upon the ledge of rock, bounding over two shoal places, and when stopped had only eighteen inches of water under her keel. The captain, finding himself in so perilous a position, at once sounded his steam whistle, and continued it from four o'clock Sunday afternoon until Mr. Fowler approached, in his little dory, at 3 o'clock Monday morning. It was then that the skill of the young man who knew every inch of the rocky ledge beneath — its length, breadth and depth — became available in saving this large steamer and valuable cargo; for she was 340 feet long, only nine months old and belonged in Westpool, England.

After an hour spent in parleying with the captain as to the way of getting out, with the wind increasing all the while, and the sea commencing to break on all sides, and convincing the captain that if it was at all possible to save his ship the effort must be made on that tide, he gave the direction of the course to be followed, to the captain. "You must back her," said he. The captain hesitated to give the word, as he feared she would strike the pinnacle of the ledge. Finally the great ship went astern and Mr. Fowler took the helm, and she was swung slowly round into a gully or rift in the ledge, about two rods wide, with the sides sloping down like the steep roof of a house. "Are you

sure this course will take us off?" asked the captain. "I am not sure of anything" was the reply; "but I am sure it is the only course of safety." The ship had a foot of spare water under her keel; twenty minutes later and she was in twenty fathoms, and all was safe.

"What shall I pay you?" said the captain. "What I have done" said the intelligent fisherman, "is a deed of kindness; I shall set no price on that." The captain gave him a \$20 gold piece and urged him to continue with him to Boston, but after watching the ship pass Cape Ann in safety, he left in his dory for home. Had the captain attempted to follow his own course he would certainly have lost his ship, and perhaps a portion if not all of his crew of thirty men. Here was a ship and cargo, valued at half a million dollars, saved from destruction by the skill of a humble fisherman.

FALL FISHING.

THE Fall season of 1884 was not propitious for fishing at the Pool, for, with good weather and plenty of bait, the fishing all went to the "dogs." The dog-fish "ruled the roast" and came off victorious. They remained a fortnight later than usual, and where, the previous season, the fisherman had six weeks of good hauling, during the present one, ending the 1st of November, they scarcely earned their salt. These dog-fish are excessively annoying to fishermen. They swim in intermediate water, and intercept the bait to such a degree that it is almost impossible to reach the cod, which wait plenty enough at the bottom. They are as voracious as New Jersey mosquitoes, and not much more valuable when caught, as they have to be, yielding only a little oil and thin substance not profitable for land dressing. With a good catch of Fall fish, ordinarily, the fishermen haul up their boats by the 1st of November, with contented hearts, their net profits adequate for their winter supply. Large codfish come in upon the shoal banks, say from six to ten fathoms, and often the Jennie B., with four men, would capture from 3000 to 4000 pounds. Some fifty men were engaged this season, in the fruitless pursuit of fish.

Herring were plenty in October, though they usually strike off in the Fall. A visit to the Pool about the mid-

dle of October revealed the true condition of things. The boys had been out scouring the rocks and trolling for fish, without success, but Capt. Frank had struck a bonanza of herring, and was busy bailing them out from a 16-foot dory, in which, from the lack of barrels, they had been salted. These herring were the product of two nets, set outside of Wood Island, into which sixty barrels of herrings had put themselves. These nets sank to the bottom, requiring six men, two dories and a seine boat to raise them so that they could be picked. One of the nets was entirely destroyed and the other one damaged. The herring were all transferred to barrels. Capt. Frank was eloquent regarding the general luck, and his yarns about the dog-fish, and the difficulty of getting a "sound" on account of them, would seem sufficient to exhaust all the "tongues and sounds" in the fisherman's vocabulary.

An October day, with the boys, in the Jennie B., affords an average chapter of experiences. At 4, A. M., when deep sleep rested upon the denizens of the Pool, came a gentle tap at the window, and responding "All right," I was in an instant on my feet and beginning to dress. I was not long in following Albert to the landing, where the skipper, with the boys, were all ready for a day's business upon the Peak. The crew consisted of Capt. W. F. Goldthwaite, Albert Goldthwaite, Baker Leggalee, Irving Milgate, and myself. It was a bright starlight morning and the promise seemed good for a pleasant day. There were, however, signs that had a different meaning to the fishermen, who live by the sea and watch its changes. It had rained hard the night previous, with a good deal of distant thunder and lightning. Some thought the wind would settle in the N. E., and that we should have a storm from that direction, it having been blowing from the S. E.; others thought there was every evidence of a fine day.

We were on the deck of the Jennie B. by 5 o'clock, and variously employed in getting ready to start on our

fishing expedition. As we slipped our mooring we noticed that the main land and the islands were becoming slowly enveloped in a thick mist. The moisture that had fallen during the night had made the Jennie B. look quite dingy, which led Capt. Frank to remark that the yacht had "a thick coat of Portland dock paint on her." The wind was very light, with a sort of gray look around the horizon. Close to the water a thick fog had set in, and as we passed Wood Island and Gooseberry Island we could only see the trees upon the one and the high ground upon the other, although we were in close proximity. We were obliged to move very carefully toward Washburn, the breakers upon which could be distinctly heard, but, although we passed within a stone's throw of the rock, we could not see the water dash upon it. Our next move was to run outside of Beach Island and the ledges to South Point, where nets had been set for herring, which, at this season of the year, are required for bait. The dory, with two men, left the Jennie B., in search of the nets, which were found without much trouble, and the fog lifted sufficiently to allow us to see them picking out the fish. John Amber, a veteran fisherman, in a dory, was also taking his "pick," forming a part of the picture.

We secured a barrel of herring and struck out for the Peak at 7:30, A. M., taking the veteran Amber in. The sloop W. H. Clement was ahead of us, having got from fifteen to twenty minutes' start, owing to delay at the herring nets. The fog had cleared off a good deal before we reached the Peak, so that we could discern the shoremarks for a few moments at a time. Judging that we were nearing the ground, we rounded to and sounded, and found ourselves in 40 fathoms. We wanted, really, but from 36 to 38 fathoms. Backed and filled till we dropped anchor in 37 fathoms, at 10:30, A. M. We immediately commenced fishing, but found, to our sorrow, that we had dropped anchor in the vicinity of innumerable "kennels"

where dogfish do congregate, and for two hours we fought the fiends, occasionally, however, hauling in a handsome codfish, but not often enough to make the business remunerative.

At about 12 o'clock the captain raised his finger, as if it were a barometer, and said: "We are going to have a change in the weather, and that pretty quick. Come, Albert, let us put a reef in the mainsail." This was done, the sail lowered and clewed up, as was also all the other sails, too, by this time, as it was evident that we should have a blow. The sea was dotted all around with sails, and, to windward, one after another of the fleet either reefed or hauled down their canvas. The sky in the west and northwest looked angry enough, and, being out so far, trouble was anticipated; therefore we prepared for the worst. About 12:30 the wind came, with a vengeance, threatening to carry all before it, but found the Jennie B. fully prepared to receive the squall, which lasted, very heavily, for some minutes, and then settled down into a severe northwest blow, with occasionally ugly puffs.

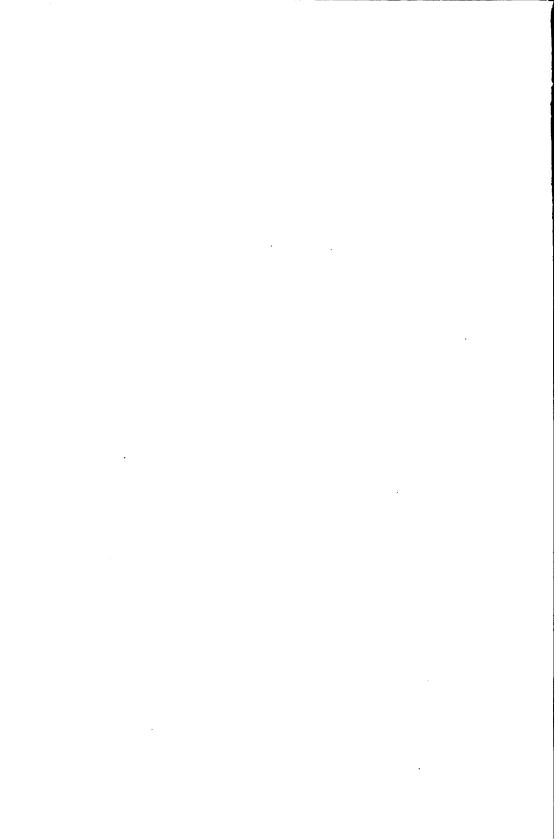
As soon as it was possible to raise our anchor we did so, though it was a hard matter to manage. Our strongest men could not start the hawser one inch. We then hoisted our double-reefed mainsail, but this, with reefed jib was not sufficient to beat up to our anchor. The foresail was then added, which accomplished the purpose, and the anchor was soon upon deck. The next thing was to determine whether to run to the northward or stand in towards the land to the westward. We concluded to head towards the land, hoping to be able to keep our course to Cape Porpoise, but the sea was so rough that, with pitching and tossing, and the wind striking the vessel abeam, headway was stopped materially, and the best we could do, under the circumstances, was to head up to Wells Bay, where we found the wind increasing and the sea rougher than when we started upon the shore tack. After running

about five miles we tacked to the northward, and crossed over our outward direct line about four miles from our late anchorage ground. We were staggering along under double-reefed mainsail and jib, though twice we had set the foresail, that was hauled down as quickly as it was set. When any one hears a skipper give an order to "Lower the foresail, and do it quick!" and then cry "Stand by the mainsail!" the dullest may guess the fact that it "means business." On our shore tack, we headed, this time, pretty well up to Timber Island, and when we tacked to the northward we fetched a point about two miles to the south-east of Wood Island. Through all the blow the hands of Capt. Frank were upon the tiller of the Jennie B., his weather eye to windward watching the puffs and ugly streaks of wind as they fled on their way to the south-east, causing the boats in their track to tremble. We were fortunate, as we neared the Washburn, to find smooth water, and, after making one or two short tacks, passed in by Gooseberry Island, reaching our moorings at 6:45, P. M. We had sailed twenty-five miles to overcome less than ten, occupying about six hours. Thus ended the cruise of the Jennie B. for 1884.

The story of the storm cannot be complete, however, without naming the experience of others in the elemental strife. The W. H. Clement started from the fishing-ground before the squall, and had got about half way in before it came on, but was obliged to anchor, as she had in tow a dory full of herring, and the water swashed so that there was danger of its capsizing. The sloop Agnes, Capt. Wm. M. Hussey, succeeded in making a favorable tack to the northward, and, under double-reefed mainsail, weathered the blow in a very ship-shape manner. A brig, running down before the wind, bound to the eastward, had her yards and sails hove aback by the sudden nor'wester, and it was some time before the crew could bring the vessel to her bearings and take in sail. A few mackerel-



A CODFISH FROM JEFFREY'S BANK.



catchers were seen here and there, ploughing along through the sea under close-reefed sails, having no port in view, but scudding their way along like sea-gulls. The two small boats that we towed out to the Peak started in before the blow came on, and had nearly reached a place of safety, when they were struck by the squall. Amber proceeded as well as he could, with his "tender sail," until he was overhauled by the Agnes and towed in. Capt. Bruell anchored, as he could make no headway, his oars being blown out of the rowlocks and moving impossible. Freeman Rich, who was on the fishing-grounds, endeavored to reach the land and was obliged to anchor, and the life-boat crew, from the Life-Saving station, were sent off to his assistance. It was a "galy" day for the spirits of the deep, but as no calamity attended the demonstration, the mortals who participated in it may talk about it as a chapter from the book of their experiences.

SWORDFISH.

Swordfish are taken without interference from "dogs," and the summer of 1884 yielded a prolific harvest to the fishermen of the Pool, the Eva A. Race, Capt. Warren Rich, and the Etta B. Rich taking nearly a hundred each. These two made swordfish a specialty. Other vessels engaged, in part, were proportionally successful. These consisted of the W. H. Clement, Capt. Jacob Verrill, Emma Pearl, and the Agnes. Portland has been the market. Swordfish were very plenty all along the shore from Block Island to Mount Desert, and large numbers have been captured off Seguin and Monhegan. For a description of the modes of taking swordfish, the reader is referred to details in other pages of this volume. There is no end to interesting stories of swordfish capture, and the listener sits entranced to hear the hardy fisherman reel off his yarn of adventures that make him an object of admiration. They are stories of daring and peril, and the garrulous old "salt" loves to tell them, even though they wax ancient from recital, but the experiences he describes are far more interesting than amusing, and the listener would hardly like to fill his position to win his fame. may be romantic and brave and picturesque to balance for hours on the end of a bowsprit, in a pulpit, with pole and dart in hand waiting for game, but the fisherman fails to see it, his thought bent on some occupation on shore. would willingly change places with his listener, even if he were not worth more than a few up-town blocks and a cotton mill; and he who swings at the mast-head, on the look-out, takes a wider view than the limited deck below, and longs for a "cot beside the hill" where he can plough the land instead of the sea. Of course the same men are not confined to the same constrained position. Where a crew consists of three or four they change places, but their lot is a hard one, any way, and they would gladly resign their most exalted place for some employment a little nearer the level of the deck. There is an interesting story told, among the incidents of last summer, relating to the taking of a swordfish. As the W. H. Clement neared a swordfish catcher, it was observed that the vessel's dory was being pulled on deck. When the Clement was within hail, the skipper of the strange vessel cried: "If you'll secure that barrel and swordfish warp you may have the fish." Capt. Jacob went for the fish, and secured it without much difficulty. When the barrel and warp were landed on the vessel-from Portland as it proved-the fact was revealed that two men in a dory were in the act of capturing the fish, when suddenly the monster came to the surface and commenced swimming around the boat, during which operation he had driven his sword through the bow streak of the dory, causing a formidable rent, and the men were obliged to abandon the fish, still attached to their barrel, and attend to their boat, which was leaking badly. They stuffed their oil jackets into the leak, and

then, by sitting in the stern, which brought the bow out of water, they were enabled to get back to the vessel.

The Jennie B.'s dory was fastened to a large swordfish for three hours, with two men fighting for his capture, before he could with safety be brought to the surface.



OLD TIME FISHERMEN.

THE Swampscott correspondent of the Lynn Union, in speaking of the fishermen of fifty years ago, goes over to Marblehead, to us the "Cunny Lane" and "Barnegat boys," representatives of "Mugford," who captured the British powder ship and ran her through the blockade into Boston harbor in 1777, descendants of Gerry, of Revolutionary fame, and Colonel Glover, who commanded a regiment of Marblehead fishermen, the boys who paddled George Washington across the Delaware and landed him safely on the plains of New Jersey—Descendants of the men who manned the frigate "Constitution" or who were starved in the dungeon of the prison ship "Jersey," and later on who participated as privateer men in the war of 1812-14.

Capt. Thos. Widger, the old hero of many a close encounter on the ocean's highway, was a privateersman, and later well known in Swampscott as a sturdy fisherman, who, tired of the Grand Banks and merchant service, settled down among our townsmen and lived to a good old age. Dying, he left a good name behind him, and a large generation who appear to be endowed with much of the old gentleman's patriotism and devotion to country.

Another of the old-timers, is Captain John P. Harris, who came from Marblehead to Swampscott fifty years ago,

and is still here, hale and hearty at the good old age of 82 years. May he still continue to stop with us. "Cap'n Jack," as he is cleverly called by his intimate friends, is a gentleman who has spent nearly his whole life on the ocean, and principally as a fisherman. Fifty-two years ago he was skipper of the "Paul Jones," a Marblehead fishing vessel of fifty-eight tons burden. His last trip to the Grand Banks, of Newfoundland, in this craft, was made in 1832, and it was a voyage thrilling with narratives of the Leaving Marblehead in August, with a crew of seven men, the second day out the vessel sprung a leak, and put into Portland for repairs, the Banks being reached without further disaster. The season's catch began, and the result was 12,400 codfish—a pretty good haul for the time engaged (about three months). Nov. 28th, Captain Harris, having wet his salt, stood to the west 'ard homeward bound. December 5th, he struck a big gale, which threw the vessel on her beam ends, and broke in five stanchions, lost his boat, and split the main-boom in three pieces, scudding for seventy-two hours in a terrible sea. The vessel could not possibly beat to wind'ard, and after a run of twenty-nine days he made St. Thomas, West Indies, "considerably broke up and demoralized," says the captain. He lay there twenty days for repairs, and then set sail again for home, making the run in nineteen days, when he dropped his anchor in the Vineyard Sound, and finally reached the home port, Marblehead, on the 22d day of February, having been gone six months, and passed through more hardships and dangers than he ever before or since experienced on the wild old ocean. The "Cap'n" succeeded in bringing home his trip of cod, but they were well pickled. With few exceptions, his friends all supposed the vessel and crew at the bottom of the sea, but his good wife never gave him up, but watched and waited for his safe return. Instead of bringing the customary smoked halibut, and the odoriferous hagdon, he

presented his wife with a half barrel of sugar, and a keg of tamarinds. Captain Harris's memory is fresh and good, and to hear him relate his past experiences is really a treat to any one who has reverence for the grand old days in which our fathers lived in their prime.

This is a good story of the Lynn Union, but it pales before the one about old Capt. Brace, of Salem, one of Pingree's captains, who sailed between Salem and Calcutta in the Rosa Dexter for many years, and at last retired with a grand reputation for seamanship, and yet he never knew the first thing about navigation. He made his voyages by instinct and the stars, and his owners, not knowing his deficiency, never questioned him about it. That he made quick voyages was enough for them, and he won the title of "The Ninety Day Man." On one voyage, near the last of his career, he brought home a service of plate, that the captains and underwriters of Calcutta had given him for saving their shipping. The facts were that, on a bright calm day, in Calcutta river, Capt. Brace was seen busily housing his upper spars, and everything was in a bustle on board, taking care of the rigging and securing the ship. Watchful captains asked why he was doing it, and he told them there was going to be a typhoon. He was an old fellow and others heeded his example, lowering their masts likewise. Some, however, laughed at the old man and his prediction, but in an hour or two there came on a most tremendous gale, driving ashore those who had sneered at him, while those who had imitated him were all right. He paraded his present with triumph, but never told how he knew the typhoon was coming. One day, after he had retired from the sea, he was sitting in the sun upon his veranda that overlooked Boston Bay, when he suddenly yelled out "A typhoon's coming! A typhoon's coming!" and it was found that he had been suddenly seized with gout, and, through his pain, had betrayed the secret he had kept so long.

A DAY AT YORK BEACH.

THE following rhymed record of a day at York Beach may not be inappropriate here, as York is in near neighborhood with the Pool, and the proceedings of one may serve as an alternate for the other:

POETRY OF THE SHORE.

The morn is calm, the billows' rhythmic roar,
Measured to time that time can never beat,
Rings in grand cadence o'er the sounding shore,
And foaming surges, with invading feet,
Press on the silver sands that, evermore,
Resist attack with a persistence meet,
Back the assailants constantly compelling,
Whose ranks are e'er with reinforcements swelling.

Sublime a scene like this! as here I stand;
Confronting nature in domestic battle,
Although the sea but simply chafes the land,
And its deep voice is but as infants' prattle;
But when the wintry waves in anger grand
Assail the shores to make the windows rattle,
Then is the time—though very few that do it—
To come a thousand miles, or less, to view it.

And what a view is this, at morning hour!

The deep sea stretching to infinitude,

Heaving in vast sublimity and power,

But in the gentle air, with breath subdued,

And half awakened, as its eyelids lower, Smiles placidly, in beatific mood, Meeting the sun, as o'er the distant Nubble It comes, a fierce, huge, incandescent bubble.

A beauteous change! The waves grow sparkling bright
Beneath the presence of the jocund sun,
Dancing like fairies 'neath the new born light,
While Sol looks down, benignant, on the fun!
And the paternal ocean smiles bedight,
Rolls on, as bid to do by every one,
From Byron down, and morning's fretful surges
Become transmuted into playful splurges.

Here at York Beach may the sojourner find
More happiness than anywhere awaits
Those who to see old Neptune are inclined,
Dressed in his bathing suit, who circulates
His billows lavishly to please each mind,
If bold or timid, and the heart elates
To own a serfdom (however independent),
To the old York sovereign of the sea, resplendent.

See the horizon into distance dips,

The heavens there hanging upon earth's far marge,
And the faint outlines of receding ships,
(Or schooners) small, in seeming, as a barge;
While the night's mist before the morning slips,
Like to some ghost, permittedly at large—
For instance that old one of Hamlet's father,
Who came it o'er his "cranky" offspring rather.

Boone Island, but a candle-stick by day,
Stands pointing upward with persistent will,
Like those who strive to point the heavenly way,
But stick, tenacious, to earth's doings still;
Though when the night succeeds, the timely ray
Doth with glad confidence the sailor fill,
Sending him on with gratified emotion,
Lord of himself and master of the ocean.

There tiny boats row out upon the brine,
Or else are rowed with cultured muscle strong,
To gather something in the fishing line,
That to this province fitly doth belong,
Where cunners, credulous 'neath ocean shine,
And round the bait in nibbling numbers throng,
Until they find, as one of old has spoken,
A pitcher gone too oft may come back broken.

Oh! What delight to dawdle o'er the tide,
With line suspent, addressed to those below,
And feel the teeth decidedly applied
Of those there waiting, curious to know
Just what we'd furnish them, so much denied
Of luxuries that we have to bestow,
Until they find, the epicurean sinners,
That they're without their jackets, for our dinners.

It may be cruel in a human sense,
But just like other things of man's device,
There's fun in it of magnitude immense,
And though it may be naughty, it is nice;
And Mr. Bergh may talk from now till hence,
Mourning the fish's agonized demise—
He'd quite forget the cruelty that hooks 'em—
To taste the way in which Louisa cooks 'em.

Talk of your brook trout from your mountain stream!
They're well enough to those who can't get these:
Here is the height of epicurean dream,
The culmination of the art to please;
The acme of all hope, as all must deem
Whose appetite is qualified to tease,
And the impossibility to match 'em
Is in accordance with the fun to catch 'em.

The tempting surf to bathing now invites,
And naiads seek the beach in queer array,
To revel in the breakers' fierce delights,
And in abandon gives themselves away;
'Tis not the most delectable of sights,
To see such objects in the light of day,
And I can't think a wife was ever chose on
A beach with such abominable clothes on.

And I have seen a dude with horror held,
Standing before a party in the wave,
With every seeming faculty dispelled,
His outspread hands applied his eyes to save,
Shocked to forgetfulness as dress rebelled,
When in the surf the wearers fair did lave,
And only left the contemplated dimity,
When apprehensive of a boot's proximity.

The tide goes out. The watery line retreats
As if about relinquishing attack,
But still the surf, in fierce endeavor, beats
Upon the shore and then skedaddles back,

And, though subdued in myriad defeats,
'T will still press on, with power in no wise slack,
Banging away with a success as futile
As man's, engaged in some emprise inutile:

What time I've roamed along the sounding shore,
The breakers thundering at my very foot,
All irrespective, in their equal roar,
Of favor, as in days of King Canute;
Minding the monarch not one fraction more
Than yonder dog, a half amphibious brute,
Who in the rolling waves defies disaster,
And plunges in to follow his young master.

Oh! restless evermore majestic sea!

Thy monotone, like music, fills my brain;

My heart in deepest sympathy with thee,

Catches the cadence of thy grand refrain,

That saddens, as it sounds, a mystery

Of feeling seemingly akin to pain,

And yet not quite, a sense of something louder,

An earnest longing, waked by smell of chowder.

Yon is a storm, and far there o'er the main,
The curtained clouds descend the view to hide,
A mist pervades the air, and distant rain
Scuds with the breeze above the ruffled tide;
The yachtsmen douse their sail, who deem it vain,
With canvass full, the gathering winds to bide,
And then drop anchor in the billows' bosom,
Letting the fierce winds blow as it shall choose 'em.

Like those philosophers of ancient Spain,
Who, we are told, when a great deluge poured,
Magnanimously chose to let it rain,
With good cigars and other matters stored;
And others, too, at such times should be fain,
When they can't help a thing, how'er deplored,
To let it happen with a mind contented,
The more because it cannot be prevented.

'T was but a squall—the clouds to seaward sweep,
The sails are up again, and the bright sun
Shines on the vapor that the clouds still keep,
And the fair bow of promise spans the dun,
The waves again in gay exuberance leap,
As though exultant, with a playful run,

And everything is for the storm more glowing; Even the grand old waves seem brighter flowing.

Now night, in calm benignity, "comes down,"
With stars and silence its paternal "tip,"
The lighted cottages that darkness crown,
And mirthful cadences, from many a lip,
Plainly reveal, as shadows deeper frown,
That sea-shore votaries won't give up the ship,
And there's a saying here, of those who've stayed out,
It is not late till Nubble Light is played out.

The Nubble light sheds forth its lurid gleam,
Succeeded by the starlike ray of Boone,
And sea and shore seem but a mystic dream,
A summer phantasy set to the tune
Of gentle surges, that enchantment seem,
When, on the dreamer's eyes, outflashing soon,
A flame appears, by the wide ocean glaring,
Proclaming that a clambake is preparing.

Now, of all groundnuts that are dug by man,
The clam has precedence, and old and young
Have gustatory longings as they scan
The luscious morsel, scenes like these among,
Where a weird circle, like those under ban
Of furies, as the light is round them flung,
Sit patiently and sing, or, eager looking,
Waiting for clams that are in seaweed cooking.

And such was this wherein my palate took
An active part — more active than my feet —
And as the bivalves in their shells did cook,
My watering mouth and eyes, with zeal replete,
Took in the situation like a book,
And scene and seasoning made the feast more sweet,
Needing but this al fresco exposition
To give supreme delight to deglutition.

Ah, old York Beach! I'll bear away from thee A rich remembrance of thy sovereign worth, Where scenes sublime, and hospitality, Made it yon time, the crown of all the earth; Where the deep music of the summer sea Blent with the tones of human song and mirth, Where cunners fried, the best of little fishes, And chowder ruled, the monarch of all dishes.

And long within my inner ear shall sound,
The rythm of thy billows as they roll,
In memory's eye appear their wild rebound,
As they fall back before the land's control;
And I shall pray the season be brought round
When I again may bathe with earnest soul,
In thy grand tide, needing no bathing garment,
And, as 'tis only soul, there'll be no harm in 't.

PROF. WIDESWATH.

SWAMPSCOTT.



THE ideal fishing village: that for fifty years was Swampscott, Mass., an ancient hamlet on the coast of Essex county, until 1852 a part of the city of Lynn. If in these latest years, the place, instead of a fishing village, has become a fashionable summer resort,

with elegant villas and thronged hotels, it has the grace not to forget, but to glory in, its early industry. The town seal, upon which old residents look with unceasing pride, represents a Swampscott skipper getting his schooner under way at the rising of the sun. The occasion of this just pride is in the fact that while the fishing interest was in its best days, it was carried on by an exceptionally high class of men, and distributed its gains so equitably as to benefit, not alone a few favored citizens, but the entire community. Notwithstanding that considerable capital was embarked in the business, it was carried on upon such terms that the men who braved the dangers and performed the work in catching the fish were the principal sharers in the profits. Some of our readers may have visited the village of Scheveningen in Holland, the place where the herring fisheries, which have brought such abundant wealth into the Netherlands, had their origin.

Like Swampscott, this place has now become a famous summer resort, but unlike Swampscott her fishermen, who have wrested wealth from the waves, have not themselves profited by their toils, but have passed their gains over into the hands of a few capitalists. While the latter, therefore, have grown immensely rich, the workers and their families have remained a class by themselves, poor, untrained, unaspiring—fishermen and fishwives and nothing more. Whereas, the fishermen of Swampscott have been men among men. The skipper who commanded a vessel was the equal of his crew and shared the same with them; and all alike were the equals of the owners, oftener than not, being themselves the owners. Thus the man, who with his own hands drew the cod from the brine, and who as he walked up the beach, clad in his oil suit, may have seemed to the sauntering visitor but a common laborer, was yet a substantial citizen, having his own comfortable, wellfurnished home, not devoid of luxuries, and was an influential director of the affairs of the town, while his children were growing up, well trained and educated, to take their places in life beside the sons and daughters of men in the professions. A contrast this, to the Dutch fisherman content with his pipe, who to-day goes down the Scheveningen beach to his place aboard another's ship, followed by his peasant wife, carrying on her head his hamper of stores, to return and wait for him in a home which will never even aspire to those appointments which all Swampscott homes contain as matters of course. Truly, as compared with foreign fishing interests, or as compared with the conditions under which the industry is now carried on from Gloucester or Boston, those old-time Swampscott ways were the very poetry of fishing life. Indeed a berth upon a Swampscott vessel in those days, was accounted a prize to look forward to, as one may desire a lucrative commerappointment. The consequences of this prosperity were that a pretty village grew up-almost every house

owned by its occupant—and gained for itself in time churches, schools, a town organization, and all the appliances of modern New England life.

As to the origin of this fishing industry, it was coeval with the settlement of our shores. The most distinguished name in the early history of Swampscott, is that of Deputy Governor John Humphrey, who came from England in 1634 and made this place his home until his return in 1641. We have a record that in 1632 a vessel laden with fish, of which he was a part owner, was wrecked off Cape Charles, and twelve men were drowned. As his interest in the business would hardly have ceased when he came here upon the ground, we may reasonably say that Swampscott fishing interests date back 250 years, and began under no less honorable auspices than the patronage of the worshipful Deputy, afterwards General John Humphrey. Daniel King also, a merchant of considerable enterprise, who died in Swampscott in 1672, is supposed to have been interested in fishing. Little, however, can be positively affirmed of the business, until near the close of the eighteenth century. Shore fishing from small boats, it may be assumed, was always carried on to some extent; but in 1705 James Phillips and several associates purchased a schooner of about twenty tons burden, called the "Dove," and embarked in a larger enterprise. In 1820, this single schooner had given place to six, of from twenty-seven to forty tons measurement. Another thirty years, and the fleet, great and small, numbered thirty-nine sail with an aggregate of a thousand tons measurement. Three decades more and the maximum as to number of sails-reached about 1870—was passed, the fleet consisting in 1886 of twenty-four registered vessels, with an aggregate (new or custom house) measurement of not far from a thousand tons.

Some noteworthy changes have been made in the construction of these Swampscott vessels. The first schooners,

known as "jiggers" or "pinkies," were nearly as sharp at the stern as at the stem, the stern rising to a point several feet higher from the deck than the bow, in which point was a groove for resting the main boom. The last Swampscott pinkey to be built was the "Bonny Boat," constructed in 1836; but it was some twelve years later before this style of boat had ceased to be in the majority in the fleet. The immediate successors of the pinkey were the old fashioned, square-stern, clumsily-built, slow-going vessels, modeled after the heavy, sea-going ships, and of which the "Banner" was perhaps the best Swampscott specimen. The "Launch," one of the last of the pinkies, used often to contest with the "Banner" the claim for improvement on the part of these square stern vessels. It is, perhaps, doubtful how this contest might have ended, had not a new vessel, superior to either, entered the field. 1842 the "Jane" was added to the Swampscott fleet by Mr. Eben B. Phillips. This vessel, built a few years before at Duxbury, had distinguished herself by outsailing the Boston pilot boats, and as speed was a great desideratum in the fishing trade, vessels of her general build were destined to displace both pinkies and square sterners. to the "Jane's" own exploits, Postmaster D. P. Stimpson of Swampscott, who was for several years her master, relates that she once sustained a creditable contest with the first large pleasure yacht owned in Boston, Mr. W. P. Winchester's "Northern Light." Coming in to Boston fully loaded with fish the "Jane" was overtaken Minot's Ledge by the "Northern Light," and the skipper supposed of course the yacht would go by him. Finding, however, that his vessel was doing so well, he made her do a little better, and the yachtsman doing his very best and indignant that a fisherman should lead him such a race, was yet unable to pass until they had reached the Castle, a course of some fifteen miles. For the first half hour the crew of the "Jane" had been busy on deck cleaning their fish, making it an additional wonder that she had stood the yacht such a contest. The conservative old skippers, in their heavy going crafts, said at first that the "Iane" would do well enough in fine weather; but that such a boat would never stand the storms and rough seas which fishermen have to encounter. On the very first occasion, when she and what was allowed to be the crack old-timer, were caught out together in a gale, the "Jane" gathered up and went into port and was all unloaded before her rival came in sight. From that time onward there was no question as to her abilities. As to her shape, no other craft was ever exactly like her; but the model, which she was the means of introducing into the fleet, and which now obtains in all Scampscott vessels, was that of the sharp, graceful clipper. Constructed upon this clipper model, some of the present fleet have attained to great speed, and might take no mean place beside our famous ocean racers. The "Paul and Essie," for example, built in 1882, has been mistaken for a yacht, and complimented as such, for her beauty and speed. In her one might easily and pleasantly make a voyage around the world. As this is a typical Swampscott boat, a brief description of her may be given. She has one deck and two masts, is 78 feet long, 20 feet in breadth and 71/2 feet deep, her total custom house measurement being 66 88-100 tons (old measurement oo tons), 6 38-100 tons of this capacity being in enclosures upon deck, so as to give facility for handling a large catch of fish at one haul. She carries a mainsail, foresail, staysail, gaff-topsail jib, flying-jib, and balloon-jib; and if she does not "walk the water like a thing of life," she yet, like all her companions of the fleet, can make a quick run to market.

Methods of fishing have also changed, as well as the style of vessels. The fish taken are chiefly cod and haddock, for ground fish, and mackerel. Until 1857, ground fish were caught by hand lines, each fisherman handling

two or three of them, with one hook on each. From that date began the practice of trawling, or fishing with hundreds or even thousands of short lines (about two feet long) and hooks suspended (about six feet apart) from a long trawl line. These trawls are "set"-extended in place upon the fishing ground with anchors at both ends by men who go off from the vessels in dories. To "haul," a long and heavy trawl is perhaps the hardest work a fisherman has to do. Since 1855 mackerel have been taken in large seines measuring from 100 to 200 x 20 fathoms. All mackerel vessels carry a seine boat, in construction a large size, lap-streak whale boat. When a school of mackerel is sighted by the look out, this boat at once puts off and lowers its long seine entirely around the school, and then with a pursing string the bottom is closed, and, if the work has been successful the game is secure. Unless the vessel has been able meantime to sail alongside, the seine is then towed to her, and the fish are bailed out by dip nets. When convenient to run to market the mackerel are iced and carried in fresh; otherwise they are salted.

In former years, Swampscott was itself the best market; indeed, prior to 1840, was almost the only extensive market along the coast, teams coming hither from all the upper country for their fish supply. "It was nothing unusual," says Mr. Thompson's book, "to see from fifty to one hundred vehicles at the beach at a time, some of them from Canada and drawn by four horses, which came to town from Boston after their proprietors had purchased merchandise and loaded in that city. Such teams would be put up here, and in the early morning would be started on the home trip." Even within a decade, many fish were brought in and sold in Swampscott and carried up to Boston in wagons; but latterly, it has proved better to carry the fares directly to the Boston market.

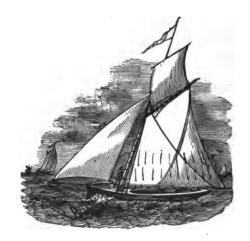
Reform has been made in the clothing of the fishermen.

Their oil suits, enveloping them from head to foot, have been worn now for more than half a century, having been substituted for the old cumbersome and expensive suits of leather about the year 1828. The making of this oil clothing is the only manufacturing industry of Swampscott, save the building of boats. Not a few of the latter are built here for other waters, the builders having earned a high reputation.

A not unimportant feature of Swampscott fishing, indeed the feature which has given to fishermen from this port their exceptionally high rank, has been the liberal "lay," or contract between the owners of the vessels and the men employed. This is such as to give a much larger proportion of the profits to the fishermen than is the case with Cape Ann or Boston vessels. For example, the settlement on a fare of fish at Boston would be as follows: First of all, before any bills are paid for food, cook, etc., the vessel draws one-fourth part of the gross receipts for a cargo. Then from the remainder the bills are deducted, and the balance is divided among the men. Whereas, upon the Swampscott lay, the bills are first paid, then the vessel draws a fifth and the balance is shared by the crew. Thus on a fare of \$300.00 when the bills amounted to \$100.00, according to the Swampscott lay, a crew of twelve men would receive \$13.33 each, and the vessel \$40.00; while on the Boston lay, the men would get only \$10.41 each, and the vessel would draw \$75.00.

Though this fishing business has passed its palmiest days, it still is a flourishing industry and may yet assume its old proportions, though the fish are never likely to be marketed here again. All told there have been 132 registered Swampscott vessels engaged in fishing, and their contributions to the wealth of the state has not been insignificant.

To those who are now inclined to this kind of sport, no pleasanter vacation trip could be suggested than to arrange with an intelligent and companionable Swampscott skipper—and most of them are of that kind—to take a week or ten days with him upon the waters of Massachusetts Bay. Or, perhaps, he will go outside of Cape Cod, or down the coast of Maine. What with the chances of falling in with some fine looking yacht and perhaps beating her at sailing; or of sighting a school of mackerel at the same moment with some other vessel and then seeing a lively contest as to which should first cast a seine around them; or of getting a good fare and then scampering with all sail for market, beating or getting beaten by the rival boat, the amateur, if a true fisherman, would find himself quite in his element.



SUPPLYING THE MARKET.

SHORE fishing for the Boston market has greatly changed since fifty years ago, when and since, for a long time, the business was done, almost exclusively, at Commercial Wharf, where the boats landed and sold to customers—dealers and others—who chose to buy. The wholesale business was limited, and people residing at the north of Boston or in towns beyond, would visit the wharf on their return home, to procure fresh fish from the boats, that were sold very low. Quite a procession would at times be formed of fish purchasers carrying home their cod, haddock or mackerel, and a dinner or breakfast of fine fresh fish, was the best and cheapest meal that the domestic man could procure. The wharf was a favorite resort for many who visited it for the fun of it, to listen to the breezy altercations that often occured between the fishermen and their customers, and often the visitors would be tempted to become purchasers where a string of fine fat mackerel could be had for a mere "song of sixpence." Portly citizens, merchants, clerks, and housekeepers generally, would embrace the occasion to supply their larders at home with the fresh-fish luxury, and go away bending under the weight of large bunches of delicate mackerel. This was continued until companies were formed to purchase of the fishermen at wholesale, hucksters increased,

and retail fish-stores grew numerous, when the romance and fun departed. Apropos to the visitation alluded to, a friend tells me a funny anecdote of one who would pass in these days as a dude, who was so nicely fastidious that he could hardly have been induced to carry a bundle, even though it should contain a silk dress for his wife. day, happening upon the wharf, he entered into the spirit of the scene and naturally made a purchase! He enclosed it nicely in paper, tied it up carefully, and proceeded homeward. Dropping in upon the one who told me the story, he held out his bundle, saying: "You can't guess what I have in this." "Nothing easier," was the reply, entirely at random, "I should say you had three fresh mackerel there." The man actually turned pale. "What," said he, "does it look like it?" He was assured that it did not, but, confessing to two mackerel in the bundle, he could not be assured that they had not betrayed themselves, and employed an office boy to carry them home.

The vessels engaged in the old trade were principally "pink-stern" schooners—the origin of which name I never could learn—defined by Webster as having a very narrow stern, who supposes it to proceed from a "casual" meaning of an Italian word, signifying "a little eye or preparation," but the philologist must have had a strong imagination to have so applied it to the Chebacco boat. These boats were from Kingston, Cohasset, Scituate, Duxbury, and a few from Plymouth and Provincetown, the South Shore preponderating over the North, though there were some from Gloucester and Marblehead. They were from 25 to 75 tons burthen, each, the latter tonnage very rare. They always went home Saturdays, and left for the fishing grounds Sunday night. This was the constant practice for a long time, the crews being principally town's people. They would come into Boston on the afternoon of each day, and, if they did not sell out, close the balance of their fare next morning, in season to leave for the fishing

THE FISHING FLEET AT T WHARF, BOSTON, MASS.

. • ï grounds. The business after a while extended from Commercial to Lewis and T wharves, the fleet constantly growing. Some of the fleet subsequently crowded upon the packet piers, others occupied City wharf and anywhere that they could find an opening, and others even went to South Boston above the bridge, but the recognized headquarters were at Commercial street. None of the vessels paid for the wharf privileges that they enjoyed.

The fish business was, for the greater part, peripatetic, peddlers, with handcarts, thronging the wharves, dealing directly with the fishermen, and carrying their merchandise from door to door. There were no wagons then employed for the purpose, and by daylight, in hundreds of localities, the huckster proclaimed the merits of his wares—"All alive! Just out of the water!"—with lungs like a stentor. The handcarts were the rivals of the long-tailed trucks of those days, of which tens of thousands were owned in Boston, for transportation. After a while both trucks and handcarts disappeared, superceded by the express wagon, and now the huckster yells from his wagon and sells his wares with an effrontery commensurate with his new-found importance.

The business soon began to attract attention, and one or two agents established stores, acting intermediately between the buyers and sellers, and the trade grew until it became the voluminous and thrifty system of to-day. The pink stern boats disappeared—rarely now to be seen—succeeded by substantial square-sterns of from 80 to 180 tons, the most substantial and costly vessels built. In summer they are able to carry from five to ten tons of ice, to stay away three or four days, and make a great saving in their passage to and from the city, thereby increasing their stock of fish. The agents, who own parts in these vessels, have increased to a host; so much so that they have leased T wharf for their special accommodation, and a more energetic set of merchants Boston does not possess.

The business has fallen off, on the South Shore, and is principally confined to Gloucester and Provincetown vessels, and the old-time crews of town's people have changed to include all nationalities. The "catch" is simply enormous. The old-fashioned way of taking fish was by hook and line; in the new way, by setting a line, with 300 to 500 hooks attached, over night, to be hauled in the morning, and frequently a fish will be found on every hook. hooks are baited with pogy or herring, that are obtained from down-east fishermen that do little besides catching these fish for bait. This bait is cut by hand and the trawls are coiled in tubs or baskets. The men are never idle. All either fish or cut bait, and, soon as free from any special toil, over go their lines to see what response may come from below. These vessels carry from twelve to twenty-five hands, and each being so heavily manned is a guarantee of their greater safety. The crews are a very hardy set, and, as a general thing, they more orderly than those in the merchant service. thing, they can't do anything with a drunkard, on a fishing voyage, and shun him. As regards the profits of the business, the middle man makes the greatest, as is usual in most of such cases, as the fish to the consumer costs him as much as lamb, if not more, and average higher every day in the year. The more there is sold the more is the return, and none of our dealers show any particular reasons for dissatisfaction. The distance which the Boston fish trade extends is enormous. railroads transport its product to the far west and all intermediate points, and fish from the water, to-day, packed in ice, to-morrow may be served for dinner in thousands of homes beyond the Hudson, or away up north hundreds of miles from sea-water. California and the western states are supplied by the railroads with fish, due to the ice for their sweetness, and New York city depends upon Boston market for a supply.

The fresh fish business has become one of Boston's largest interests, and it differs from that of the mackerel and salt fish trade as much as a Russian goods importer does from a West India sugar importer, having no relations with each other, beyond drawing their several products from the deep.

A SHORE TOWN.

A FRIEND has furnished me with a sketch of the little town of Sedgwick, in Hancock county, Maine, that may not be irrelevant to the readers of my book, which is discursive in its scope, and of which it may be said that "everything is fish" that comes within its net.

"Sedgwick is on the Benjamin River, which stream is mostly formed by flowage of the tide, and is but a mere brook at half tide. It runs into the Eggarnoggin Reach, which is a sort of ocean river, running between the islands and main land. The town is twelve miles from Castine, east from Blue Hill, about twenty from Bar Harbor, and two from Deer Island. It is mainly hills and valleys, with not much level ground except on a ridge, that leads to Sargentville. Besides farming and fishing, there is little doing in the town. A great many eggs and berries, however, are sent from there. Blueberries are very abundant, together with raspberries and mountain cranberries. A daily mail and telegraph connect Sedgwick with the busy world. It has a doctor or two, but no lawyers, and two stores where can be had anything in the grocery line, boots and shoes, hats and caps, clothing and furniture, ship-furnishing goods and all kinds of rigging, indeed everything but rum. That is not to be had in town, and, as a consequence, there are no rows or rowdies there. Everything is peaceful and lovely. A steamboat touches there every day, in summer, from Boston or Bangor.

"I can't say what the town is most celebrated for, but deem that for enterprise and spirit the ladies bear the palm. Most of the church fund is raised by them, the public hall was built by their exertions, and the plank sidewalk owes its existence to them. The religion of the town, like most of the down-east towns, is Baptist—not the real old hard-shell sort, but of a more liberal kind.

"The views about Sedgwick are very fine. That from Caterpillar Hill is grand beyond description. The Mt. Desert mountains on one side, the Camden Hills on the other, with Katahdin and Gold Mountain on the north, and

many others, with numerous towns and villages and hundreds of islands and bays, form a picture never to be effaced from the memory.

"The people are kind and very hospitable, and never tire in doing kindness. The hotel, which the town boasts, carries the idea of temperance so far that not even a cigar is to be had, although the natives of the place come, now and then, into the office to have a friendly smoke with the genial landlord and guests, and discuss the various topics of the day. The hotel is named the "Traveler's House," and it is well named, as it is more like a home than any other public resort anywhere. The commercial traveler, who gets within ten miles of here and does not come to this hotel to spend the night, must be a stranger in these parts. Old Mr. Lawson, who is three score and ten, is the hostler, and if a horse gets within the above-named distance, he will surely come, without being driven, to get the good care and generous feed of old Uncle Lawson. At least, so says an old peddler who has been on the road for twenty-five years.

"Sedgwick is celebrated for its old people. At a party in the fall of 1884, there were some fifteen or twenty of over seventy-five years. There are several in town who are eighty and ninety years old, and Mr. Philip Prevear was one hundred and five years old the 8th of December, 1884, having been born at Hampton Falls, N. H., December 8th, 1779. His second wife, still living, is over eighty. He is full of fun and as lively as people who are not yet sixty. He voted for Blaine and Logan, and looks good for ten or twelve years yet.

"The principal buildings in Sedgwick are the Church, Masonic Hall, Hotel and Custom House, which latter is a small wooden building, with the Post Office under the same roof. This latter would not give a stranger a very high opinion of Uncle Samuel's business there, but, since the renovating and remodeling which has just been done, one can now get into the office without climbing a pair of rickety stairs; for, strange to say, the building, which is only one story and a half high, was formerly a carpenter's shop, down stairs, with the post office and custom house above. There was only a part of the premises where one could stand up without bumping his head.

"There are about thirty thousand bushels of clams dug in Sedgwick every winter and sold for bait."

From the above description it may be judged that it is a very nice little place to visit, and fishermen and yachtsmen find it a convenient and desirable stopping place. Its near proximity to Bar Harbor, with the increasing importance of that watering place—soon, perhaps, to become a commercial depot in connection with steamers from Europe—must tend to its advantage, and the time may come when its custom house and post office will arrive at a two story distinction, and be a coveted place for some modern seeker after official emolument.

A RHYMED LETTER.

THE following rhymed letter, received from my friend Mr. Shillaber, explains itself. Oppressed by a fit of the gout, to which he is subject, he writes, from his "auld chair's well worn leather," as cheerful a strain as though he were actively on his pins:

TO THE MASTER OF THE JENNIE B.

CHELSEA, MASS., May 25, '85.

DEAR SMITH,—though stern misfortune dour
Hauds me enslavit by its power,
Thanks be to pen an' ink, the hour
Rins not so bad,
When I can banish feelings sour
Wi' you, my lad.

An', stickit here my desk beside,
My thoughts gang free an' far an' wide,
Flowing out swiftly, like a tide,
Wi' purpose true,
An' swift as railway trains they glide,
To crack wi' you.

What pity 't is, this simmer weather,
That we twa couldna meet thegither,
Beside my auld chair's well-worn leather,
An', face to face,
Gie interchange wi' ane anither
O' talk's best grace.

An' how are ye, my worthy fren'?
I hope ye're hearty, but an' ben,
An' that auld shoulder ache has taen
Itself awa',
An' that the mind o'er pain agen
Is sovereign law.

I wish your mind o' wheels an' cranks,
So deft controlling mills an' banks,
Could gar distemper show its flanks,
An' make it flee,
As easily as Captain Frank's
The Jennie B.

Oh, wad the power that ae directs
Gie ye release frae ail's effects
That sae annoy ye an' sae vex
Wi' bitter pang,
I could forget my ain defects
To see ye strang.

To-day a breath comes frae the Maine,
And Capt. Frank has kindly taen
His pen, in happiest refrain,
To gie me cheer,
But hauds out promises, in vain,
I mauna hear.

He beckons me, in fishing line,
The Jennie B's good crew to join,
An' where auld Tanto's waters shine,
Cast o'er my bait,
To draw the beauties frae the brine
That there await.

Ah, glad wad I the beck obey,
An' tak' my willing steps away
Where codlings bide an' dogfish play;
An' what for no?
The gout holds unremitting sway,
An says "No go."

But you, my fren, hae this in store,
Anticipate, an' muckle more,
Awaiting you on sea an' shore,
An' may your joy
Be unimpaired by ache or sore,
Nor "dogs" annoy.

You scent the pleasure from afar, When July's incandescent star Shall drive you from the town awa', To seek the cool That's ne'er denied or checked ava At Saco pool.

There, out upon the bright blue sea,
The win's an' waves cavorting free,
The fair, half conscious Jennie B.,
Wi' bounding keel,
The "Commodore," wi' rapturous glee
Will new life feel.

No monarch of the mighty deep
Whose royals the empyrean sweep,
Will feel more pride, as on will leap
His bark o' grace,
To where the festive codlings keep
Their well known place.

Or should a swordfish show his fin,
Awa' he'll drive the prize to win,
Wi' Capt. Frank, so used, lang sin',
The dart to throw,
He'll feel a pride that town nor "tin"
Can e'er bestow.

I'll here reel up my ragged rhyme,
Wi' hope that a' may happen "prime,"
An' gie ye fun an' joy sublime,
The season through,
An' every moment of the time
Be quid to you.

B. P. SHILLABER.

CAPE COD.

AT the time of the May Flower's arrival at Cape Cod, and while stopping at what is now Provincetown Harbor, a number of those on board wished to make a settlement there, but, being overruled by the majority, they all proceeded to Plymouth. Shortly after a number of the party favoring settlement at the Cape, returned thither and settled at Nauset, now Eastham, but the sterility of the soil was such that they were forced to find some other occupation by which to obtain a livelihood. Fish of all kinds, the cod especially, abounded along the shores, and the colonists naturally took to fishing as a pursuit, and it has been the main branch of industry at the cape ever since. It was from the cape, in early days, that some of the fishermen went to the Island of Nantucket to teach the people there the art of whaling, who thrived so abundantly under their instruction, that Nantucket was at one time the largest port in the country, and had the largest fleet engaged in that Now, however, scarcely a vessel sails from that business. port.

The exact date when Cape Cod vessels commenced their fishing on the Grand Banks of Newfoundland, it is hard to determine, but it was very early in the 18th century. The vessels employed were not larger than some of our shore fishing boats, to-day, and would carry from four hundred

to eight hundred quintals of cod-fish, according to their sizes. At the present time they have vessels engaged in the same business that carry four thousand quintals and upwards, Provincetown having a fleet of large vessels, second to none in the states, numbering some sixty sail in all.

The mackerel fishery has passed through many changes. Every town on the cape once had its mackerel fleet upon the waters, but now the industry is confined to but a few towns, and the fleet sailing therefrom is very small. During the years between 1840 and 1850, Truro had some twenty sail of vessels engaged in the fishing interests and other maritime occupations, but by the closing of the harbor, caused by shifting sands, not a vessel of any kind now leaves that port, and where there was once a large village, where ship-building was carried on to some extent, and all the different artizans plied their respective vocations, with flourishing stores to supply every article used, now the town has entirely disappeared, and the only structure there is the Old Colony railroad station and its out-buildings. was from Truro, in 1848, that Capt. Rich, in the schooner Richard, made a mackerel trip, and took, with hook and line, on what is called the Middle Bank, situated between Cape Cod and Cape Ann, one hundred and seventy-five barrels in about five hours, the largest catch ever known to be taken with hook and line. During the years 1847 and '48, -known as the "Chatham Years," on account of the vast shoals of mackerel being off that part of the cape, -it was no uncommon occurrence for vessels from Truro to get two trips per week, at Chatham, of from two hundred to three hundred barrels, and land them at Truro. With all the modern appliances of seines, etc., that season's catch has not been beaten. Truro has suffered largely in the loss of her seamen. In the memorable gale on the 2d and 3d of October, 1841, forty of her seamen were lost, at one time, all in the prime of life, one only having arrived at the age of fifty years. There is a monument erected to

their memory by their fellow citizens, on which is inscribed the names and ages of those who were lost.

Wellfleet is the only town on the cape that carries on the mackerel fisheries to any great extent, and the business has so decreased there, that at present there are but about twenty sail engaged in it, where, in prosperous times, there were nearly one hundred. Other fishing interests of Cape Cod, like our merchant marine, are nearly ruined, and unless something is done to revive the business, our maritime occupations will be entirely destroyed, and supplanted by others.

Many incidents of the sea, along the Cape Cod shore, could be written that would seem marvellous, and the old adage that "truth is stranger than fiction" might be applicable in many cases. The schooner Bion, Capt. Isaac F. Mayo, belonging to Provincetown, was in Boston fitting for the Grand Banks. Having completed arrangements, the schooner started to return home. The wind was at northeast, the weather thick and rainy. After sailing what was judged a reasonable time, and expecting to see Long Point Light, a light was made off the port bow which was deemed the one wished for, and the vessel was steered to what was supposed to be Truro shore. Soundings were taken, and she was tacked about for Provincetown Harbor. When it was judged that she was off the wharves, the anchor was let go, and the crew turned in, as the night was dark and stormy, concluding not to go ashore. In the morning, upon going on deck, through the driving mists and rain, a strange land was discovered. The boat was lowered, and, upon going ashore, it was found to be Wellfleet, the southern part, known as Great Island, the Wellfleet light having been taken for Long Point. The vessel had been steered towards Chatham, then tacked and stood across Wellfleet Bay, coming out through a very narrow passage, (known as James Harbor), not over one hundred yards wide, with a rock in the centre of the channel, the

passage only available at the very top of high water and requiring a skillful local pilot to take a vessel through, and in that case never attempted by any one in the night. Thus this little vessel, by accident and luck, had come through, and anchored upon the outside in Cape Cod Bay, without any damage and unbeknown to the captain and crew, all expecting to find themselves in Provincetown Harbor in the morning. Captain Mayo and several of the crew are alive to-day to bear witness to the fact.

Many narrow escapes from drowning, by Cape Cod men, could be narrated, but one of the most miraculous character will suffice. The schooner Frank Herbert, Captain T. L. Mayo, on the voyage from the West Indies to Boston, while running before a gale in the Gulf Stream, had two men washed overboard, by shipping a sea, as they were reefing the foresail. Their names were Aydlath and Hawes. The vessel was immediately brought to the wind, but her boat was damaged so that she could not float, and would have hardly been available if she could, in such a heavy sea, and Captain Mayo made different tacks to keep as near the spot as possible, in hope of saving the men. He was determined not to leave the scene till daylight, or till all hope was exhausted, though urged to do so by a passenger. He would not abandon the chance of saving his The night was very dark but the water shone with a strong phosphoresent light. About two o'clock in the morning, the vessel, then on the port tack, a streak of light in the water was seen approaching like that made by a large fish swimming. The passenger called the captain's attention to it, remarking that it was made by a shark, and it was no further use to look longer for the men. While watching its progress, it gradually drew nearer the vessel, and, as it got to the main chain plates, a body rose out of the water and seized hold of the irons, when a rush was made to the side and Hawes was helped on board, after having been in the water three hours and forty minutes. He was an extra good swimmer, had divested himself of all his clothing, and only tried to keep himself afloat till he saw the vessel so near that he could reach her. He had her in view all the time and knew that Captain Mayo would not abandon them while there was any possibility of their rescue. The other kept up for about two hours, when he told his companion it was of no use to try longer, raised his hands above the water and sunk. Hawes said that his faith in Capt. Rich was better, in his peril, than a life-preserver.

There are effective life-saving stations on Cape Cod, and during the fearful winter of 1885, every test was made of the humanity and manhood of their crews. These stations were established on the cape in 1873. The first upon the extreme end, comprehending in its scope Highland Light to the Race, another at what is called Peaked Hill Bars, the third at Highland. Since then another has been placed between, at what is called Highland Head, and the others have been moved to equalize the distance between the stations, so the end of the cape has got all the protection possible. They are supplied with all the approved apparatus, and the crews are composed of young men inured to the toil and hardship of sea-life and experienced boatmen. The captains of the stations are men of undoubted skill and energy. Together they present a fine body of men, ready to dare and do in the service of humanity. Every year the government makes additions to and improvements in the apparatus, comprehending improved boats, rafts, and mortars for throwing lines to wrecks, and it seems hardly possible that anything can be added to increase the facilities of the service.

There are times when, despite of all the skill and power that is available, lives will be lost. Such is the nature of our coast, where long sandy bars extend far out into the ocean, that vessels will strand out of the reach of the rocket or shot, and the sea is so heavy that it is impossible to launch the boat. In such cases all that can be done is to watch the beach and rescue any of the crews that may come to the shore on debris of the wreck. One of the most notable instances of this kind was narrated to me by one of the life-saving service men who participated in the On March 1st, 1875, the Italian bark Giovanni, from Palermo for Boston, came ashore, during a very severe gale and snow-storm, and struck the Bars, two miles to the eastward of Peaked Hill station, at 1:30, P. M. Unfortunately it was low tide and the bark stopped on the Bars, nearly one quarter of a mile from shore. The crew of the station immediately started to their assistance. weather for some time previous had been exceedingly cold and a heavy icewall was formed along the beach, in some places from twelve to fifteen feet high. It was impossible to get a boat along the shore, and the sea was so rough that it could not have been launched through the breakers had it been attempted. It was thought best to try to save the men by the use of the shot line and car. Accordingly the cart was loaded with as much of the apparatus as it would contain, and started for the scene of the wreck. After great effort the beach was reached, over the ice blocks, opposite the wreck, at 5:30, it having required four hours to overcome two miles of distance. The men, though greatly fatigued, went to the next station to procure other needed apparatus, assisted by some of the station's crew who were on the spot. A life-car was obtained and other gear, and with volunteer aid, over impracticable roads, all was ready at midnight, the crews having been incessantly at work. It was then so dark that the vessel could not be seen from the shore. A fire was kindled and a watch kept on the shore till daylight. During the absence of the station-men, two of the bark's crew attempted to save themselves by coming ashore on a plank. One of them was washed off and drowned, the other clung to the plank and finally reached the shore only through the assistance of

one Bernard Jason, who, tying a line around his body, plunged into the boiling surf and brought him safely to land, when he was instantly taken to the station and cared for. As soon as daylight opened so that the bark could be seen, the mortar was loaded and fired, with hauling line attached, which failed. Three shots were fired in the attempt to get a line on board, the line breaking several times, when it was found that the wreck could not be reached in that way. Upon the cessation of firing, the crew on the wreck, who had been sheltered under the topgallant forecastle, came on deck, seeing that operations were suspended on shore, and, the vessel fast breaking up, they went up the fore rigging and out on the yards, from which they jumped into the sea in hope of reaching the shore by swimming. The water was so cold that they chilled and sank. Some, however, kept on top of the waves for nearly half an hour, but a strong westward tide prevailing, they could not land and thus perished within the sound of the human voice. No aid could be rendered to them. The narrator of the incident said it was one of the most heart-rendering sights he ever witnessed. Upon the breaking up of the wreck, her cargo, masts, spars and sails strewed the beach for miles, affording a rich opportunity for wreckers to secure a large share for salvage. The bodies of the major part of the crew came to land and were buried in the cemetery at Provincetown.

The Peaked Hill station did an immense work during the storm and cold of January, 1885, saving thirty-one lives from two crews stranded upon the beach. It was, truly, a noble record. The achievement was performed at great sacrifice to the station-men, whose hands and ears, in a number of cases, were frozen in the attempt at rescue, while they were encased in armors of thick ice that rendered action almost impossible.

Besides those upon Cape Cod left at home to pursue fishing, and look after their cranberry bogs in the summer,

many, prompted by their early love for the sea, go away to fill places in our merchant service, every one inspired by a laudable desire to become ship-masters, and for the most part they succeed. A glance through the shipping list will prove this—the Baxters, Crowells, Phinneys, Hallets, Thaxters and Riches revealing the place of their originand no better or more reliable ship-masters are to be found than those from Cape Cod. I have alluded to the cranberry cultivation of the Cape, where, by a providential dispensation, the growth of this crop is made to supply what is lacking in the diminished fishing business. The decrease in the fishing return has been caused by its own redundance. Plenty of fish are caught-blue-fish and mackerel -as stated in the chapter on Fish Weirs, but there is no market for them with the vast competition along the northern shore, and the fishermen yield to fate. Schools of black-fish entering the bay, as they do quite often, afford rare sport as well as profit to the Cape Cod fishermen, who make lively times with their irons and bombs, and one good school will yield a profit far exceeding what is obtained in the best seasons of fishing.

Cape Cod, itself, is a very interesting spot to visit, presenting as it does less changes from old custom than any place in the state. Isolated and apart from the rest, yet with a good railroad and telegraph connection, the mass of the people move on according to good old custom, and, although many fine dwellings have been built within a few years, by prosperous retiring sons of the Cape, the old building tastes are generally preserved, which is especially the case at Provincetown, where all the dwellings and stores are erected on one long street, with their peaked ends, all alike, looking toward the harbor, presenting a very odd and foreign appearance. There are churches and schools and banks in the place, with Masonic and Odd Fellows lodges, and a cultivated society that renders its isolation bearable, and affords a fine summer resort

FISH AND FISHING.

An Essay delivered in January, 1886, before the Farmers Club, of Andover, Mass., by J. W. Smith.

MR. PRESIDENT AND GENTLEMEN:—I rise, responsive to your wish, as the loaf said to the baker. There is an old Turkish cry, "In the name of the prophet, figs!" but here, in the name of the profit, I say, fish! and everybody will accept the amendment. What I am to say about fish and fishing must necessarily be confined to generalities, as the subject is so vast, that you would cry avast, before I could get half through. I can only hope that, by hook and by crook, I can invest the subject with interest to repay your attention.

That horticulture and pisciculture have relationship, is argued by the fact, that the great Fisheries Exhibition held in London in 1883, was in the Gardens of the Royal Horticultural Society, South Kensington—a strong presumptive proof of their affinity. The two sciences are also shadowed by the practice in Maine of putting three kernels of corn and a herring in every hill, and also a closer intimacy in that tender union of the products of sea and land—minced fish and potatoes. I cannot, however, dwell on this, but spread my sails for the broad ocean of facts relating to my

subject, and cast my nets for a *fare* that may be profitable to my hearers.

The fishing interests, all over the world, become more important every year, as demand for the products of the sea increases, and marine food, cheap and nutritious, affords wider scope for men and money in meeting the increased Nearly as many, if not quite as many, are employed in fishing as in the mercantile marine service, in our own, probably, far more; and assuming our own fisheries for comparison, we can imagine the vast aggregate of those engaged in the fishing interest throughout the globe. According to the United States census of 1880, the number engaged in the fisheries was 131,426, of which 101,684 were fishermen, the balance shoremen. The fishing fleet consisted of 6,605 vessels, (with a tonnage of 208,-297 and a fraction), and 44,804 boats; the total capital invested \$37,985,349, thus distributed: vessels \$9,357,282; boats \$2,465,393; minor apparatus and outfits \$8,145,261, and other capital, including shore property, \$17,987,413. These figures are not figurative, however speculative they may be, and they have been increased since to far greater proportions. The fisheries of other countries, stimulated by demand of the dense populations bordering upon distant seas and bays, have doubtless increased in proportion as great at least as our own, and statistics would exhaust themselves, and human patience, in presenting the details. Common calculation would break its slate and run away before the accumulation of figures representing the fishing interests of the world. Large as our business is, it is but a mole-hill in comparison with the mountainous whole.

And yet, notwithstanding its vast importance, how little is known of sea fishing, or fresh water fishing indeed, beyond the stories of tourists and amateur fishermen, whose exploits tax our credulity and serve as themes for wit in the papers;—in one instance, where a sojourner by Lake

Winnipiseogee caught a fish through a hole in the ice, which, the fisher said, he lifted up out of the water to his full height, and then could only see its eyes. a whopper!" was the comment. "Do you doubt my word?" asked the fisher. "Oh, no," was the reply, "I only meant what a whopper of a fish." All that is known of either is that a need is supplied through their instrumentality. The purchaser who secures his bit of halibut, or the cod or haddock for his fry or chowder, does not think of the peril incurred to procure it, until he reads of some fierce gale on the "Banks" or elsewhere, where fishermen go down with their barks and are never heard from more, whose widows and orphans are thrown on the mercies of the world. Let us hope they may find them. The cold blasts of winter nor the heats of summer, the charms of home nor the pleasures of the shore, deter the fisherman, impelled by a destiny that binds him to a servitude unknown in other avocations. His foot is on the deck, and, come what may of peril, he braves the danger for the public good, expecting nothing beyond the pittance that his precarious toil may win. There is a vast deal to be thought of in a fisherman's career that commends him to our grateful consideration, and we should not forget it.

Then the fishing business has few landmarks by which its course may be noted. Its field is the sea. No tall chimneys with their black smoke trailing the sky, no lofty piles eloquent with whirring spindles, no palatial blocks filled with the merchandise of all nations, parade themselves for inspection as in other trades, but away upon the waste of waters, with an ocean between him and his home, the fisherman's sinker plumbs the depths, where the rolling waves toss him at their will; and thus he pursues his toil, the monotony of which would be appalling to a shoreman, relieved only at times when he does not catch anything, and his empty kit is an aggravation.

Published statistics and exhibitions—like that of London

in 1883, patronised by the Prince of Wales, (a good name for a patron of fisheries, though a whale is not a fish) and the Duke of Edinburg, and Lord Granville, and the Lord knows who—are exciting interest, and people are wondering why they never saw the fisherman's importance before. And yet he has been at the business a great while. Fishhooks, of bone and of rough iron, are found among the relics of the most distant ages, and it was a calling upon the Sea of Galilee, and of course the Mediterranean, two thousand years ago, and when the ones who were called by the Master were dispersed by his death, Peter said "I go a fishing." The Sea of old Galilee is full of history, tradition and fish.

Almost all countries have legislated regarding the fisheries, from time immemorial, in fixing bounds and establishing treaties, the earliest recorded instance in Italy, 1314, and from that down to the present day. In feudal times rivers and lakes were the province of the barons, and the law of protection lay in strong sinew and iron armor, and if foemen dared catch fish in forbidden waters, they caught it at the hands of the barons aforesaid. Laws regulating the fisheries of Newfoundland and Labrador have existed since the discovery of their value by the English and French, excluding our occupancy, but our fishermen of past generations did not regard restrictions much, but pushed their pinkies over the tabooed lines, or came so near it that they could reach over and take what they wanted from the other side.

Many new fish are coming into our waters, though the cod still remains king. I am well acquainted with him through my own introduction to him at Biddeford Pool, and I call on him every summer, sure of a very satisfactory reception. There are various kinds of cod, among which the "boneless cod" is very deceptive. He is a scaly fellow, and it is almost impossible to detect the difference between him and a cusk or hake. The cod in our Hall

of Representatives is one of the right species, and was placed there in order to aid in cod ifying the laws. He swims the aerial tide, above taking a bait, though it has been intimated that "ground bait" distributed among the "schulls" below has succeeded in luring too many to the hook. The cod is known in all the cool waters of the world, and our yet unappreciated Alaska is prolific in this monarch of the deep. We find him in his corned condition a great traveller in warm climes, and he is greatly prized where the shadow of a man at noon is measured by the size of his sun umbrella on the ground, served up with plantain,—the staple food of the Indies.

The improvements in implements for taking fish are greatly adding to the progress of our fisheries. The modes of thirty years ago have mostly been discarded, the trawl and the improved net having succeeded, in a great degree, the slower method of hook and line in taking fish for the market; but such of former methods as have been employed in the past still hold their place, and amateurs and inshore fishers for ordinary domestic purposes are retained, the hook still resorted to. One improvement can scarcely be hoped for, and that is to repel dog-fish when fishing for cod. This fish is one of the greatest annoyances to fishermen, who justly call them the "mosquitoes of the sea," for they swarm in numbers, and are always ready to bite. I have found my own patience, though cherubic to a wonderful degree, reduced to a minimum by these pesky fish, and have actually enjoyed the use of the club for their immolation on the rail. They are of the shark family, and are miserable go-betweens, the contempt of the fish below and the fishers above them.

The majestic halibut, the night-walking hake, the agile and graceful pollock, the seductive mackerel, the fierce and soldierly sword-fish, the voracious blue-fish, the aldermanic salmon, and the modest haddock, have, besides the cod, a home in our waters, with many others, of which the haddock is most prolific and most approved by many for domestic purposes. Hucksters procure them from the boats when plenty, and cry them "All alive," to suburbans for five and ten cents apiece. They vie with the mackerel for cheapness, and for quality are often as doubtful as "No. I mackerel, ten cents a dozen." Lobsters—"long-tailed crustacea," so-called by science,—form another branch of the fisheries, though, I am sorry to say, the lobster crop is diminishing, and I repeat the lines of Goldsmith:—

"Ill fares the land, to threat'ning ills a prey, When lobsters threaten failure and decay."

Law may try to save them, but laws are not self-sustained, and law-makers are too fond of lobster salad to be very rigorous in enforcing them,—making a compromise between the love of law and the love of salad, as delicate an operation as "splicing the main brace" at sea. A number of states in our own country are passing laws for the protection of fish, and the U. S. Government is liberal in its appropriations to enable the excellent Fish Commissioner, Prof. Spencer F. Baird, to prosecute his piscatorial researches. This Commission has reported that there are one thousand and five hundred different varieties of fish in American waters, salt and fresh, of which but one hundred and fifty are utilized as food.

I shall say but little of fresh water fishing, although it is matter for warm congratulation that fish-culture in our streams and ponds is crowned with the best results, restoring to our inland waters the descendents of peoples that once inhabited them, with a possibility of causing a plenty as great as that of the olden time, when, in taking an apprentice, his indentures specified that the urchin should not be compelled to dine on salmon more than four days in a week. The salmon in our streams will be *heartily* welcomed to his old haunts, and that he may increase, in size and numbers, is our epicurean wish. When the Columbia River is fished out, and the last "lone fisherman" has

FISHING GEAR AT OLD WHARF, BIDDEFORD POOL, MAINE.

• • reeled in his line, then, perhaps, the Merrimac, restored to its pristine status, may make the world glad by its munificent supply of the old-time luxury. Such, in a modified form, is the hope of enthusiasts, and any approximation to it will be regarded as a benefishal dispensation. Efforts should be made by commissioners, by hybridizing, to produce a boneless shad.

Fish culture, in our own country, is in its infancy, and, like experiments in horticulture, devoted attention and needed time are required to bring it to perfection. The spirit is awakened, and the means are ready to make it a success, and the science of the soil and the science of the stream are identical in one particular, the production of THE BEST, whether fruit or fish, for human benefit. One ploughs the land, the other ploughs the sea; one whips his cattle, the other whips the stream; one cultivates the acre, the other wields his rod; one looks to his net profits, the other to the profit of his nets;—and land and sea cultivation have harrowing experiences. But, while shore culture may be improved through science, fishing on the stern sea is unchanged, the same to-day as at the beginning, when the water was separated from the dry land by Almighty fiat. It is true, as I have said, that new means are constantly being devised for working this vast field,—new instruments, new boats, new seines; but the crops remain the same, yielding bountifully for the good of man, with no mildew, nor blight, nor season's difference to mar their quality.

Gentlemen,— my limited time admits of no more extension of this grand and vast subject, the importance of which must be admitted even from the little I have shown. Its scope is limited only by the bounds of the universe, and as it is said that the drum-tap of England is heard around the world, so the fisherman's conch shell or tin horn penetrates every fog from Newfoundland to earth's remotest shores, and returns again, bringing airs from every sea beneath the sun.

A WINTER LETTER.

I HAVE, in previous portions of the book, introduced a Summer Letter from the same source as the following, and insert this as a balance to that, showing that friendship, in its wintry aspect, may be as genial, with icy air about it, as when invested with the atmosphere of summer.

CHELSEA, Feb. 4, 1886.

My DEAR FRIEND SMITH:-

The hurtling air is cold without,
And rattling at the water spout,
It greets the ear with elfish shout
And fearful din,
And struggles with persistence stout
To worry in.

It struggles with each window pane,
As if to dash them in 't were fain;
Half yielding to the forceful strain,
The chattering frames
Scarce their integrity maintain
To thwart its aims.

It dashes round the feathery snow,
As if 't were out upon a "blow,"
Dimming the street lamps' honest glow
With fierce assail,
And making it a thing of woe
To face the gale.

Pedestrians called to meet the blast,
With stamping footsteps hurry past,
Their thoughts on home attaining cast,
Which stays and cheers,
Achieved with grateful heart, at last,
And frozen ears.

But I defy its fierce attack,
With good coal fire behind my back;
I hear the stiffening branches crack
On yonder tree,
And make no groans, nor cry Alack!
But smile with glee.

My duplex burner squelches night,
And by its bright and cheerful light,
I sit in slippered ease to write,
With whate'er pith,
A letter, in the storm's despite,
To my friend Smith.

Dan Shakspeare wished a "pen of fire,"
But no such agent I require;
My pen is warm as my desire
To please my friend;
I don't wish higher to aspire
Than this one end.

Old Winter is progressing fast,
With Candlemas some three days past,
And all the signs of that forecast
Were counted good;
May't prove more gentle to the last
Than this fierce mood.

Bring forth the steeds! on with the sleigh!
Let tinkling sleigh-bells glad the way,
While the warm blood's harmonious play
Keeps tune and time,
And rosy health asserts its sway
Above the rime.

And you who revel in such scenes
As winter brings, with handy means,
Take in the gentle wife and weans,
— A dainty load—
Or some good friend who sleighward leans,
And try the road.

Then give to mirth the guiding reins,
Forget your penalties and pains,
Till shoulder ache no more distrains,
And care is stilled,
The crispy road, the whitened plains,
With pleasure filled.

Leave business toils that so annoy,
And give the passing time to joy,
That Nature's agencies employ,
To quicken health,
And you will gain from this, my boy,
Far more than wealth.

I cannot sleigh, but I can slew
A few rough rhymelets round to you,
And tell you what you should pursue,
Like many more
Who preach but never practice do,
Except to bore.

As I sit here immured, alone,
How much advice abroad I 've thrown,
But rare accepted, I must own;
For man, not shrewd,
Rejects such wise suggestions known
For his best good.

But you do not my counsel need,
Behind that active-going steed,
Where inclination prompts the deed,
And all advice
May follow at whatever speed,
Upon the ice.

I'm out of breath with cantering rhyme,
And trenching rudely on your time,
Waiting perhaps to hear the chime
Of sleigh-bells sweet,
That make our frozen wintry clime
With bliss replete.

B. P. SHILLABER.

THE MENHADEN, OR PORGY.

THE accompanying plate is an exact portrait of the menhaden, a fish abounding in our waters, and, which, through recent discovery, has assumed a distinguished position in our commerce. It belongs to the family of the shad and herring, but can give them points in regard to bone. Menhaden have never been popular as an article of food, but have long been recognized as food producers, of which toilers by the sea have availed themselves by employing them for manure, three to a hill of potatoes and corn. The rivers and creeks so swarm with them, in their season, that they are a very easy prey, and crops of farm produce are not so sensitive to bone as human crops, and their digestion is easy.

Science has determined that the chemical constitution of menhaden is similar to the phosphates of the south, the accumulation of ages, and that by chemical process the fish may be made immediately available for agricultural uses. To this end menhaden fishing has become momentous. Thousands of vessels are employed in their capture, millions of capital invested, and the amount taken of almost infinite magnitude. By actual statistics, in 1875, (and the number has greatly increased the past decade) there were employed in taking menhaden, 2,643 men and 343 vessels, (of which 39 were steamers), and the amount of capital employed

was \$2,000,650. The number of menhaden taken was 563,000,327, equal to 1,877,767 barrels.

The ammonia of the fish is produced by grinding and compressing the bone and fibre, the oil separated for other uses, and phosphate of lime, likewise a result, that is converted into an agricultural appliance.

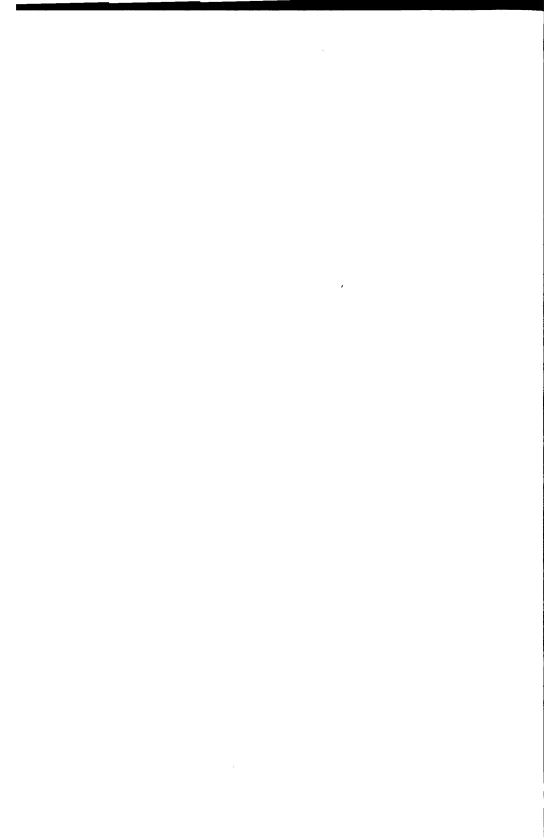
Notwithstanding the vast numbers taken of the fish, there seems to be no diminution of the quantity. The water where they swarm is literally alive with them. At sea the schools extend for miles, and expert fishers, with their nets, draw in immense numbers. Yet, as large as the amount may be, there is not enough to meet the demand for the product made from them, which reveals in increased crops and luxuriant grasses.

Thus it will be seen that the menhaden takes rank over fishes of far weightier importance, individually, and becomes a power through his combined status. He is a handsome little fellow, as may be seen from his portrait, and of not much consequence as a single fish beyond his good looks, but, though not even fit for food, follow him logically on his mission and he will crop out in both food and clothing, seen in rich fields of wheat and corn for the former, and in cotton and wool for the latter.

The menhaden, in his chemical form, becomes a mine, as rich as Golconda, to the country, and renders the product of decayed guano undesirable, with a resource as substitute inexhaustible in its supply when its capacity is evolved. So the agile little fish is to be respected and reckoned among the wealth of the land, more certain in its yield than more pretentious assets.

In 1880, Professors Goode and Atwater published an extensive history of the menhaden, including its habits and uses, extending through nearly six hundred pages, the latter devoting himself to its value as an agricultural application, and the various modes of preparation and adaptation, and I refer my readers to that work for all necessary description

THE MENHADEN.



and statistics, my space being too limited to admit of their introduction. There are many works engaged in the production of superphosphates from Menhaden, the largest of which are the Pacific Guano Company, located at Wood's Holl, Mass., on Vineyard Sound, and on Chisholm's Island, Charleston Harbor, the business headquarters of which are at Boston. The company, originally, was formed for the importation of guano from an island purchased by them in the Pacific ocean, from whence its name. The imported guano having deteriorated somewhat in quantity and its commercial properties, the attention then awakened by Maddock & Goodale, regarding the Menhaden as a stimulant to cultivation of the soil, led to the present manufacture, which surpasses or equals the best guano imported. The fish is combined with the phosphatic rock of Chisholm island, and formed of fossilized matter descending from infinite ages, and the result is an article of immense agricultural value. The Holl manufactory is very extensive, superior to anything of the kind in the country.

The superphosphates are made from the "scrap" of the fish after it has been tried out for its oil, which is procured from the manufacturers of the article and shipped to the works at Wood's Holl. The above describes but part of the process, sulphuric acid, kainite, incidentally, and sometimes common salt, also entering into their composition. There is none of the guano imported now that formerly was combined in it, but the South Carolina phosphatic rocks are deemed equally as good without it. The works for making the superphosphates, including those for preparing the acids - covering acres of ground - are very extensive, presenting an imposing appearance from the sound. works are situated about half a mile north-west of the village of Falmouth, and as the spot was eligible for a watering place fashion protested against their being placed there, but the town deemed that a good tax bill was better than the uncertainty of summer visitation, so the plant was made

to the mutual content of the company and the town, and there it will remain. The works at Charleston are about two-thirds as large as those at Wood's Holl, and consume about the same relative quantity of "scrap," amounting at both works to from ten thousand to twelve thousand tons yearly. The company own Swan Island, in the Caribbean sea, and Chisholm's Island, its phosphates coming from the former during the "family disturbance." The entire surface of Chisholm's is composed of this phosphate, a very rich deposit, though surpassed by that from Havana, between Cuba and San Domingo, from which source, likewise, the company receives its supply.

Dog fish and sharks are utilized at some works for the same purpose as the Menhaden, but the farmers will find it out through diminishing crops, though the fishermen would hold up both hands for the extermination of the "dogs," the pests of the sea. Sharks are more endurable than the imps that are inimical to both fisher and fish—preventing the former from reaching his prey, and the latter from the privilege of preying, at his own risk.

UNITED STATES FISH COMMISSION.

ERNEST INGERSOL, IN HARPER'S WEEKLY.

THE work of Professor S. F. Baird, as United States Commissioner of Fish and Fisheries, is popularly thought of mainly, as one of propagation and the restocking of vacant streams with fish, but at the beginning the Commission did not mean to undertake any such labor. The duties of the Commissioner were defined by the law of February 9, 1874, creating his office, to be an investigation whether any and what diminution of food fishes of the coasts and lakes of the Union had taken place, and to inform Congress what ought to be done about it.

For three years previously, in fact, Baird had been making such investigations privately, and his first official work was to examine into the condition of the fisheries and fishermen of New England. The wide knowledge thus obtained led to the despatch of himself and staff to Halifax, in 1877, to serve as witnesses and experts during the examinations which resulted in the existing treaty between Canada and the United States in regard to fishing.

Only a short time had elapsed, however, after the appointment of the Commissioner, before a proposition was made by the American Fish-Cultural Society, which resulted in an appropriation by Congress, and instructions

requiring Baird to begin the introduction and propagation of useful fishes throughout the country. The inland streams and the Great Lakes received the earliest attention in this direction, carp, trout, salmon, and white-fish being raised in government hatcheries and distributed. Such hatcheries now exist in all parts of the country, and the most beneficial results have followed in the restocking of depleted waters. Parallel with this, and necessary to its success, went constant study into the characteristics and habits of the fresh-water fishes, the earlier reports teeming with this kind of information.

Professor Baird had been a student of fishes for many years, and for ten years anterior to his appointment as Commissioner had spent each summer in scientific study on the Northern coast. He well knew, therefore, the bulk and value of the sea fisheries of New England, and had been watchful of their decrease in some directions. these the Commission, therefore, turned early and earnest attention. At Gloucester and other fishing ports, statistics and information were gathered at all seasons. In addition, the Commission each summer established itself at some shore station, and by spade, net and dredge, dissecting knife, microscope and experiment, made itself thoroughly acquainted with the whole life of the ocean adjacent to the shores, seeking to discover the breeding, migratory, or feeding habits, the subsistence, enemies, or associates, and the influences generally which affected the presence or absence, plenty or paucity, of all the cetaceans, fishes, mollusks, and crustaceans useful to us. An enormous quantity of specimens of marine life were gathered - hundreds of novel forms every year. These were all properly preserved for the National Museum, while any duplicates obtained were distributed to prominent institutions of learning throughout the country, thus bringing to the assistance of teachers and learners everywhere (and especially in the interior) specimens of many classes of animal life wholly inaccessible to the ordinary collector. Probably half a million specimens have thus been sent out by the National Museum—a fact not generally known.

At each summer station a temporary laboratory would be fitted up, where the staff of naturalists and experimenters could work. This staff includes not only those few in pay of the Commission, but many volunteers—special students or teachers in colleges—who were glad to contribute their help in order to get sight of the pelagic zoology and profit by it. This volunteer contingent increases from year to year, to the advantage of the government work, as well as to those who embrace the opportunities offered by the operations of the Commission; and as the latter are principally teachers, the good they get is passed on to their classes in better and better instruction. This is another important educational influence exerted by this bureau.

A third flows from the elaborate publications of the Commission. The Annual Reports since 1871 number twelve illustrated volumes averaging 1000 pages each; since 1881 five illustrated volumes of Bulletins—publications distributed at frequent intervals to persons specially interested, a signature at a time—each containing 500 pages. There are other publications. In these pages is contained a vast quantity of exact scientific and thoroughly practical information, written by specialists or translated from investigators abroad, which forms the basis not only, but almost the entirety, of what is known in regard to the fisheries and deep-sea life of our Atlantic and inland waters.

Dredging and net-towing were at first done by hand from row-boats or hired sail-boats. Then the Navy Department loaned a little steamer or two, and deeper water could be traversed. Finally the Commission got money to build or buy steamers of its own, of which it now has four. One of them (the *Albatross*) is a splendid sea-going vessel of a thousand tons, fitted with every mod-

ern appliance for the dredging, sounding, and experimental fishing in the profoundest parts of any ocean. Her work has been mainly in the Gulf Stream, and in the deep waters surrounding the Antilles, and has been highly successful.

To do the oceanic work of the Commission, and take care of its steamers and property, it became necessary to fix upon a settled sea-shore station, and Wood's Holl, at the heel of Cape Cod, was chosen as the best point. The water there is of remarkable clearness and salinity—qualities needful in hatching the delicate eggs of fishes like the cod, which is carried on there; it is comparatively warm, since the southerly currents are drifted in, while the arctic current is fended off by the Cape, and the sea fauna and flora are remarkably rich in consequence. The abundance of aquatic life in Vineyard Sound is amazing. The excellence of the harbor and easy accessibility of the station are also advantages.

Congress granted successive appropriations for preparing the harbor and constructing buildings. A rocky point was surrounded by a massive stone breakwater, which enclosed a basin something over an acre in area, and, at the same time formed a harbor of refuge, behind which stormdriven vessels could find a safe anchorage. The basin was subdivided into two parts, one of which formed a great cage for keeping large captive fishes whose spawn was wanted, or which it was desired to observe, and the other became a shelter for the small boats, and was occupied by lesser fish pens. Beside this basin were erected a large building intended as a residence and offices for the staff (there were no suitable quarters and scant boarding accommodations in the village), and a commodious laboratory and hatchery. Between the two stands an engine-house and water-tower, where the heating and gas-making apparatus is placed, the powerful pumps which hoist salt-water for the use of the aquaria (healthier and handsomer aquaria do

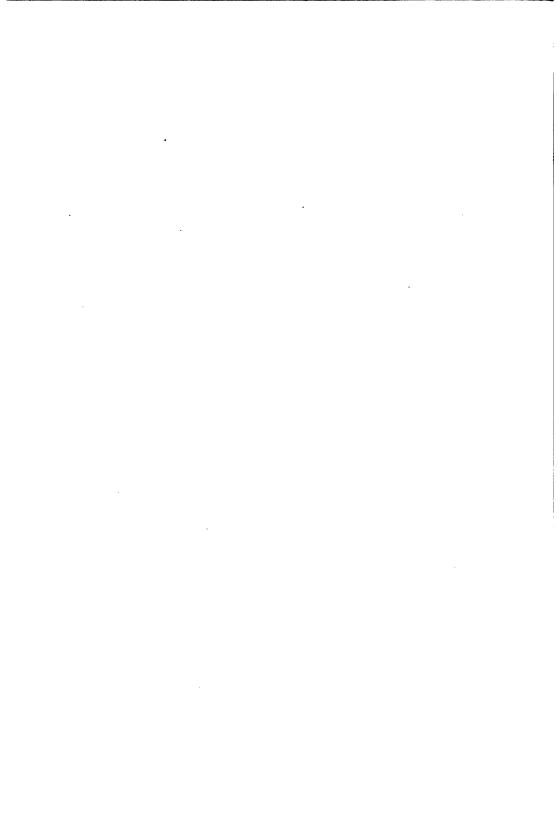
not exist in the world), the hatching-boxes and fire-extinguishing pipes, and the great machines that furnish distilled water for the use of the station and the steamers, and for the support of the fresh-water aquaria. Wharves surround a portion of the basin wall, and will ultimately be extended, so that the whole fleet of the Commission—including the new model fishing schooner, *Grampus*, of which much is expected—might lie there at once if desired, while a huge shed contains coal enough for their ordinary supply.

Though the station makes a pleasing appearance, and is as neat and tasteful as the people like to see their governmental quarters, nothing of effectiveness has been sacrificed for ornament; and it is amusing to hear Professor Baird recount the ingenuity he resorted to in order to accomplish certain desirable things cheaply enough. The expenditures of the Fish Commission since its organization amounted to about \$3,000,000, and no waste, much less any fraud, has been charged in regard to a dollar. It is doubtful whether even the "private business man," of whom one hears so much nowadays, could have set up this station for what it has cost the government (less than \$75,000, all told, if I am not mistaken); and it is certain that no one could manage it more economically, and that no investment of an equal sum by the government is productive of greater or more wide-spread benefit.

FISHERIES OF NORWAY.

NORWAY has, from time immemorial, been celebrated for its fisheries, their product affording the largest proportion of the commerce of the country, the cool waters of the sea forming a coveted home for cod and herring. The taste of the lower classes of Norwegians is for the water, and fishing is the chosen occupation. This, however, is divided with farming, as the fisherman aspires to own a small farm by the sea, on which to raise potatoes, rye, turnips, and barley; cutting hay enough to feed one horse, two cows and some dozen or so of sheep. It is a poor but independent life, and the farmer-fishermen are a hardy and healthy race. They do their farming during the four months between the spring and fall fishing seasons. Each farm, or lot, has upon it a small house and barn that are situated closely by the sea, for the convenience of change when the season demands. The children of these are taught very early to earn their own living, and many leave home at ten or twelve years, to literally paddle their own canoe. They start out, happy and brave, with little or no schooling, and become fishermen or farmers, or, fired by a higher ambition, leave for America. "Its population," - a friend writes me concerning Norway-" are cradled in their fisheries. They are the babe's joy and the old man's comfort." While the boys are farmers or fishermen, the girls





are provided with a school at which they are taught to spin, weave and make clothing. This school is situated at Sparsberg, but is not free, the pupil paying \$5.14 for four months' instruction. At times of emergency women and girls lend a hand to cleaning and curing fish.

The fishermen use nets mostly for their purpose, the cod and herring procured from different localities. The former is cured in the same manner as was employed by the forefathers. The herring are salted in barrels and are sold at the average price of \$2.75 per barrel. Stock-fish, which takes its name from the manner in which it is cured, is the cod dried to the consistency of wood, and is much used along the Mediterranean and in the tropics. Purchasers procure them from the fishermen, and prepare them for market by cutting off their heads and disemboweling them, after which they are tied together, in pairs, by the tail, and hung over a "stock," or spar, out in the sun and air, unsalted, and allowed to remain six weeks before they are taken down. They are as hard as wood. The fish are inspected before they are shipped. Stock-fish is an exclusive Norwegian commodity.

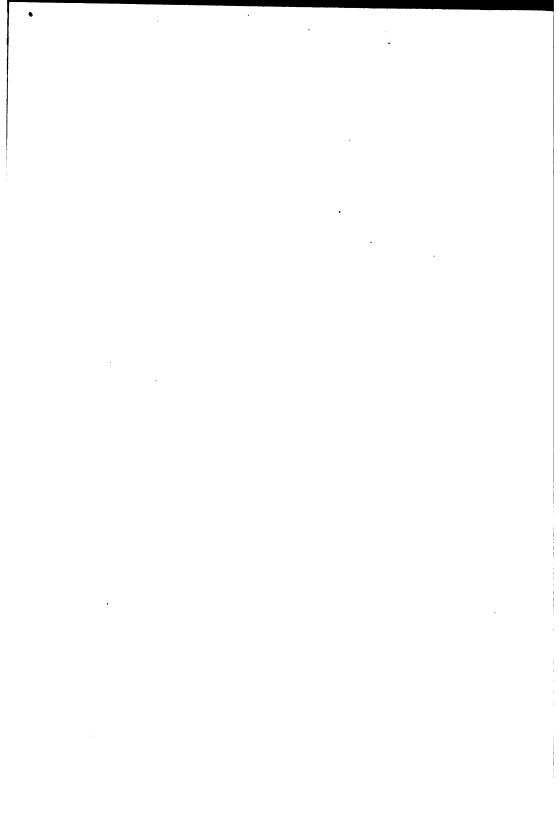
Halibut are numerous on the North coast of Norway, from Christiansund to Hammerfest. They are caught mostly with trawls. Halibut for the most part are shipped to England; the balance salted in flitches. Some years, mackerel are plenty on the southern part of the Norwegian coast, but they are seldom caught north of Aalesund. From Aalesund to Bergen, and from Bergen to Lindesneer (the southernmost point, or cape, on the coast of Norway), and thence up to Christianin fjorden, mackerel have been seen in large schools. Sometimes mackerel come along the shores and are caught with sweep-seines and nets, but most of them are caught by trawling. The way this is done is to take a common-sized cod-line, from twelve to fifteen fathoms long, with a three-quarters-of-a-pound lead on the end, (attached to the lead three fathoms of fine

gauging), and one hook. The small boats have from four to six of these lines attached to the stern, and, sailing along at a speed of from two to five knots, the lines are almost on top of the water, when the mackerel, attracted by the moving bait, will seize it. The fishermen know nothing about heaving a boat to, and throw bait to toll them alongside, and thus they are caught. The same practice was pursued by New England fishermen years ago, and some are employing the same method off Block Island to-day. Mackerel off the coast of Norway differ in size as they do here, but the mackerel caught in American waters, during the months of August and September, are far superior in taste and quality to those of Norway, but they appear to be the same kind of fish. Some of them are shipped to England; the remainder salted for other markets, at about \$5 per barrel.

Purse seines are hardly known among the fishermen in Norway, but seven years ago Capt. C. Mason, of Gloucester, fitted up the schooner "Notiee" with seines and boats and sailed for Norway. Whether he intended to fish there or not did not appear, but on arrival in Norway he sold out everything at a good price, and that was the first purse seine ever known there.

The fishermen are a hardy and jolly class of people. Although they have to face dangers and hardships through the winds and storms of the treacherous winter months on the sea, when they get on shore they forget all the narrow escapes that they have experienced while out in open boats many miles from land. They gather in their boat houses, play cards, tell stories, and fix their fishing gear for new encounters with the elements. There is more or less superstition among them, and it is their custom to mark almost everything—buckets, brooms, etc.,—with a cross, to repel evil spirits. They believe in mermaids, and occasionally reports are made that some one of them has been seen; but not one has been known to be caught.

NORWEGIAN METHOD OF CURING FISH.



There is a graver superstition regarding a flat fish, covering acres of land, by the name of skagen. He is said to lie upon the bottom, and the fishermen anchor upon his back, the fish below feeding upon the monster. When fishing is begun, the skagen rises slowly from the bottom until he gets within a few fathoms of the surface. They then pull up killock and he slowly sinks to his former position. This has belief among very intelligent persons, and Prof. Berg, in his work, claims that he has seen the skagen, and that he looks more like a land than a fish, which is very likely if at all.

For one thing the fishermen have reason to be grateful: there are no dog-fish on the whole Norwegian coast.

The fishermen, generally, have great regard for the Lord's day, and the Sunday law is rigidly enforced, by the officers of the police boat, against those who violate it, a heavy fine being imposed for fishing on Sunday. Arbors, the beer gardens, dance houses, and other places of amusement, do a better business on Sunday than on any of the other days of the week, and are supported by what is called a far better class than the fishermen.

The habit of drinking is common in Norway, the people being as "dry as a fish," whether of the fishing fraternity or not. Liquor is in almost every household, and if a stranger or familiar acquaintance happens in, the master of the house will treat him with the best he has, touching glasses and drinking to friendship and health. Christmas is a great time in Norway, lasting fourteen days. Girls and boys take their wine, which seems almost as free as water, but drunkenness is seldom seen.

Fishermen use goat skin, instead of oil clothing, when fishing. The skin is put through a process of tanning and oiling, so that it is water proof, and is sewed together with strings that are cut from the same skin, or the edge of one similar. The toilers' wives make their husbands' clothing.

The fishermen have the choice of going to sea on shares or wages, receiving in the latter case thirty-five cents per day, and furnish their own provisions. Masters' wages are \$14 per month; sailors' \$9.

Fresh water fish are not plenty in Norway. The principal among these are the salmon, which are shipped to England.

Tonsberg, it is claimed, leads the world in seal fishing. A large fleet is fitted out every year from that town, which is owned mostly by a rich merchant, named Floen, who has carried on the business for many years and got very wealthy. He holds great authority among the people of Tonsberg. He has the power to ship his men before the Navy can procure its crews. The sealing vessels are mostly barks and brigs. The men go on wages or shares as may be determined. Spitzbergen and Nova Zembla are the fishing grounds. The sealers are proud of their vocation, and it is pleasant to see a body of them off duty, smoking their long pipes in an independent way, with luxuriant whiskers, and long caps made of wool, called tophuc, esteemed a very stylish article by that class of people.

I have been indebted, for the foregoing information, to Capt. C. Johansen, of schooner Oscar and Hattie, of Swampscott, Mass., a Norwegian sailor, and Mr. Wm. Stowe, President of the Boston Net and Twine Company, and express my profound acknowledgment of their kindness.

Most of the vessels that go on Lofoden and Finmarken, during the cod-fishing season, return home, generally, during the month of July, in order to get ready for what they call Sildfiskery, (herring fishery). Fishermen as well as buyers depend as largely on the herring as they do on the

cod-fish season, and if the latter prove a failure, they generally make it up during the herring season. Almost every year large bodies of herring come on the coast of Norway, and sometimes they play off shore, in deep water, so they cannot be caught by drag seines. Therefore gillnets are used and the fish are drifted for, some good trips being made in that way. Large schools of herring are driven in shore, at times, by whales, when the long and narrow bays are filled with them. Fishermen, who are looking for a chance of that kind, stretch a seine across the coves, from point to point, and thus pen the herring inside, giving them room enough to play in, and they are thus kept for several days. Then a drag seine is employed to draw on shore all that can be conveniently dressed, the fishermen taking their own time, and out of one of these schools over 3000 barrels have been dressed. If the herring do not come into these creeks, the fishermen club together, and, taking four boats, (the easiest one to row, called "slyster-boat" for the leader), they go out in quest of the herring. The captain stands in the bow with a pole 20 feet long, the size of a swordfish pole, called Lysterstanga. The boats are rowed swiftly, the captain pushing his pole in the water now and then, and, if the herring run against it, as may be readily felt, he will know that the school is sufficiently large, and throw his seine, thus often procuring immense quantities of the fish. Then the boats are loaded, the herring carried to vessels awaiting them, and there sold to the best advantage.

The herring are large and fat, and the way to dress them is, first, to cut a piece out of the throat of the fish, and take a small portion of the gill with it in order to make the fish bleed. Then the fish are laid down carefully in the barrel, with the backs down, in a row, to be salted thoroughly.

As soon as vessels in the herring fisheries unload, they are off again for another fare. The herring season is over

about Christmas time. The days are very short, then: only four hours long; while in June the sun is up the whole twenty-four hours on the northern coast of Norway. At Christmas the fishermen start for home, and, if they have had good luck, they make great preparations for Christmas festivities. The wives and children of the married ones meet them on their return, and escort them to their house, welcoming them to home and happiness; while the single ones do not leave their sweethearts much longer waiting, but get married as soon as possible, making a home for themselves. Hundreds of people are invited to the weddings thus celebrated, and everybody gives presents of some kind to the happy pair; generally money. The marriage celebration sometimes lasts three days and nights, devoted to eating, drinking, dancing, card-playing, singing and courting for amusement.

For two months during the winter scarcely any fishing is done. During this time the fisherman shoulders his gun and goes in search of game, of which there is plenty. The eider duck abounds in Norway, but he is not permitted to shoot one under heavy penalty. Thousands of these birds flock together defying the fowler under their government protection. The fishermen repair and make their gillnets during the winter, their seines and other gear being made by state prison convicts.

They live very simply, their houses being mostly made of logs, in which the old-fashioned fire place is retained. For fuel, wood and turf are used. Wooden shoes are worn to a great extent by both sexes. Boys and girls are free at eighteen years of age. Any good citizen can vote at an election, but he must have an income of \$100 to entitle him to the suffrage.

The 17th of June is a great day in Norway, it being the anniversary of the separation from Sweden, and it forming a celebration as nearly like our 4th of July as possible, the occasion being similiar.



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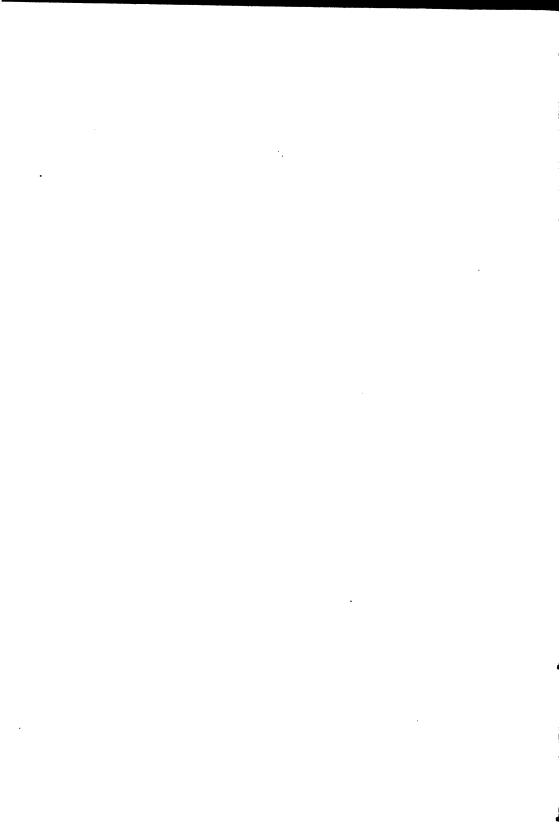
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"LAND OF THE MIDNIGHT SUN."

Du Chaillu, in his "Land of the Midnight Sun," devotes a chapter to the fisheries of the Lofoden Islands that is intensely interesting, and comes so completely within the scope of this book that I cannot forbear making a few extracts from it. I confine myself chiefly to this chapter on the fisheries, though there comes, with reading, a strong temptation to give some of his descriptive passages of mountains and native customs. My space, however, does not admit of it.

"The Lofoden are famed for their cod-fisheries, which begin in the latter part of January and last until the beginning of April. At that time the rocky and deserted islands become full of life; then bands of fishing craft come, and hundreds of small vessels are seen nestled among the islands. The codfish, in untold numbers, make their appearance, whence no one knows, to spawn. They begin to arrive in January, and leave at the end of March or the beginning of April, migrating toward the North Cape and along the Finmarken Coast; they then disappear for the year. How wonderful is the migration of fish! Whither do they go? How will they know the time for returning to deposit their ova? The codfish are found in large numbers along the coast; they occur in vast shoals only from the Lofoden Islands east, northward along the Finmarken Coast."

His destination was Henningsvær, having arrived at which place,

"Several sharp whistles warned the people of the fact. From the deck of the vessel no sign of habitation was seen, when suddenly boats emerged from behind the rocks, and speedily came alongside. I left the steamer and soon entered a natural canal formed of two islands, Henningsvær and Nalrando, where an unexpected sight burst upon us: A fleet, hitherto unseen, was at anchor, and in large num-

bers. Seventy-five sail had come here this year-sloops, schooners and cutters—with crews aggregating three hundred and twenty-eight men. Most of these vessels bought their fish directly from the fishermen; several had stores, and sold sugar, coffee, ship-bread, tobacco and many other things. There were six hundred and eighty-eight fishing boats, three hundred and fifty-one of which had come to fish with nets, the remainder with hook and line; the crews of all numbered three thousand, three hundred and thirtyseven men. Craft laden with fish, some almost to the water's edge, were going to and fro, stopping alongside of a vessel to make a bargain, pulling their loads on board, or making for the land. Immense quantities of cod were piled one upon another on the shore, men were busy opening and cleaning them, and tens of thousands of the fish were hanging upon poles to dry. Numerous log-houses were surrounded by barrels filled with cod livers, and every rock was covered with heads. Hundreds of boats lined the shore, crowding the narrow channel. Great numbers of eider ducks, as tame as those on farms, were swimming to and fro, seeming to know that no one would do them harm."

Having been welcomed into the family of the richest man in Norland (worth \$300,000 or \$400,000) he proceeds with his description:

"Henningsvær is the largest fishing station on the Lofoden Islands—there are years when over eight hundred boats go there to fish. The warehouse of my host was a sight worth seeing: long deep rows of freshly-salted codfish, six feet high, were packed together, to be afterwards laid on the rocks and dried. There are three different ways of curing the cod. The first, and the most common, is to cut the fish open, flatten, and salt it, putting it afterwards on the rocks to dry. The second is to open the fish, tie them two and two, without being salted, and hang them on frames. The third is to divide each in halves,

connected only by the gills; the spine is then taken out, and the fish hung upon the frames. This method is much the quickest, as the air now operates directly on the exposed flesh of the fish, soon making it as hard as wood. It takes one or two months to dry the fish, according to the season." * * * "The settlement is built on both sides of the channel formed by the two islands. The houses of the fishermen are of logs, generally with a single large room, around the walls of which are bunks, as in the forecastle of a ship. These rooms could hold from twenty to twenty-five men, two or three sleeping in the same bunk; but, as there were no women to take care of the premises, the beds were far from inviting. The surroundings were worse. Each boat pays one hundred and twenty codfish for lodgings during the season, and each house brings four hundred and eighty."

"The Norwegian government exercises a paternal care over the men who form such an important part of its population, and who contribute so much to the wealth and prosperity of the country. If it were not for the fisheries many districts of that rocky coast would be uninhabited."

But the fishermen have to submit to severe regulations. "Formerly no nets or lines were laid, nor any fishing permitted from Saturday afternoon until Monday morning. But a law has been passed allowing the fishermen to raise their nets till 7 o'clock Sunday morning. The maximum fine for fishing during the prohibited time is one thousand dollars."

Naval vessels patrol the sea as police, and, by telegraph along the coast, the actual catch of all the towns is known. Thus the state secures all its dues.

"The fleet of fishermen is classified in three categories: Liners, those who fish with lines and numerous hooks; Garm, those who fish with nets, and Dybsagn, those who fish with a single hook or line. The fishing grounds in Lofoden are divided into twenty-one districts; at each of

these all the boats have to start together, and all must return the same day, and about the same time, if possible. Every fishing district has its own letter, and each boat has a number; the name of every fisherman being registered, with his place of residence, birth, etc., so that in cases of disaster the crew of any missing craft can be identified. Formerly the men were obliged to remain during the whole season in the fishing district they had chosen; but now they can go from one district to another, though they must report at once before beginning to fish." * * * "Two kinds of boats are used; one is open, from thirty to thirty-five feet long and six and a half feet beam; the Finmarken boats are longer—they have a house on the poop—being from thirty-five to forty feet and more in length and from seven to seven and a half feet beam; a pole several feet long is attached to the rudder, and held by the last rower, who steers as well as pulls, thus saving the labor of one Their cabins are about eight or nine feet long, affording protection at sea and sleeping accommodations, as the men do not return to land every day. There are also little craft used for transporting the fish from the shore to the vessels; these are not more than nine feet long by four wide."

Determined to see everything, he says:

"The morning after my arrival I was up at four o'clock to witness the start of the fishing fleet. I stood by the flagstaff on the highest point of the island. No one is allowed to leave before the flag is hoisted. The fishermen came one by one, and all were seated in their boats for some time before the signal was given. At five, precisely, the flag was hauled up by the lensmand, and the air was filled with a heavy booming sound from several thousand oars dipping into the water at the same time, and working with astonishing regularity, which continued for quite a while. As they moved away the boats began to scatter, and by the time they reached the fishing bank—about



seven or eight miles from Henningsvær, covered with from sixty to one hundred fathoms of water — they were widely apart." * * * "At ten o'clock, one by one, the boats came back, and by noon the whole fleet was in, with an immense number of fish. Life had returned to Henningsvær. Boats moved to and fro, going from vessel to vessel, the fishermen trying to make the best bargains they could, and everybody was busy. On the decks were piled the fish just caught; these were cleaned on board, washed, salted, and laid in the hold one on top of another. These vessels would, after the fishing season, go home to solitary farms by the fjord, and their cargo would be dried on the rocks. The price of the fish varied somewhat every day, according to the catch; that day it was seven Norwegian dollars per hundred, without livers, eggs, and heads; it is sometimes less. Great numbers of ducks and gulls were feeding upon the mass of offal thrown upon the water. On that day the catch was said to have reached nearly three hundred and fifty thousand codfish; I have been told that sometimes it goes as high as half a million a day. Many boats landed their loads along the shore, where men were busy preparing the fish. Those engaged in this work were dressed in large pantaloons, aprons, and cuffs of leather. One man cut off the heads; another took out the intestines and cast them on one side; others put the heads, the livers, and the eggs by themselves; the latter carefully put in barrels and salted—a barrel containing the ova of three hundred fish. These were sold for nine dollars. They are sent to France or Italy, where they are used for catching sardines. The livers were put in barrels by themselves, sold to the merchants, and kept till rotten, when cod liver oil is made from them. Two barrels of fat livers are said to yield a barrel of brown oil. The tongues were salted, and kept by the fishermen for their own use. The heads were scattered on the rocks to dry, to be used to feed the cattle, at home, or to be sold with the bones for fish manure, a

regular fare. The dinner was composed of a sort of porridge, or pudding, made of ship-bread, liver and fish. I put on the best face I could, but cannot say I enjoyed the meal.

"The next day I went hook-fishing, and consequently had to take another kind of boat, and go with another set of Each of these craft generally carries twenty-four lines. The captain with whom I went was Hans Mikel Nikolaisen, from Tennerold, in Ebestad, a place not far distant from Tromosö. He was a married man, with three children, and his eyes glowed with happiness when he talked to me of his wife and little ones. This boat was much smaller than the other one, the fishing by hook being much lighter work, and the whole crew consisted of two Sea Laplanders and three strong men. The Laps were easily recognized by their short reindeer costumes, with the hair inside, and Finland boots. The wind was good from the very start, and we rapidly passed the light-house on the island of Nellanddo. About a thousand boats were scattered within a few square miles, near Henningsvær, for there were boats from other stations. After four hours we came to the place where our lines were and lowered sail. Several buoys were taken into the boat, and then began the hauling of the lines by the help of a little roller alongside. There were four lines attached to one another, each one being one hundred fathoms long. The hooks were four to six feet apart, generally one hundred and twenty on each line, and at intervals a buoy was attached to the line to prevent it from getting snarled, and sinking too deeply. The lines of all those who fished by hook contained on an average, per boat, about twenty-four hundred fathoms in all. An immense number of these lines are cast into the sea every day with the nets, occupying the waters for miles. We had not pulled in over two hundred fathoms of our own when we found they had drifted into a net, and that some of our hooks had caught it - an awk-

A NORWEGIAN SCENE-CUTTING UP THE WHALE.



ward yet common accident - but we were able to free the hooks without much trouble. We continued to haul in the fish, which were very abundant. Once again our line became entangled, this time with three or four belonging to other fishermen, and great care was necessary to separate them. The men know well their own lines, as, for greater certainty, each one is marked from place to place with the letter of the district and the number of the boat. The work was hard and tedious, for the tides and currents had done considerable twisting for several different fishermen. After the lines had been separated they were thrown back into the water with the fish attached to them. The end of our third one came to the surface, and we saw that it had been cut with a knife, and the rest lost with all its fish, probably about seventy-five. Sometimes, when too badly mixed up, lines have to be cut and hauled into the boat; in that case the men bring them ashore, and give the fish found on them to the owner, who is always known by the marks on his tackle. We then went to the other buoys and hauled in another line, capturing in all three hundred and seventy-five large cod-fish.

"After our fishing was over we went to several of the boats near us, and made inquiries about our lost line. In one or two cases, as we came alongside of the boats, my men looked suspiciously into them. Sometimes, when they find lines entangled in the nets, they draw everything on board, being obliged to do so to separate them, and return the fish. Some of the boats had parts of lines not belonging to them, which they intended to take ashore. When the fish are stolen the tackle is thrown away, but this very seldom happens. Evidently many of the crews mistrusted each other, and I was told that some fishermen would take fish that did not belong to them simply by way of retaliation, thinking that others who had found their lines had done the same. Of course it is very difficult to prove a theft of this kind; but, when caught, the culprits are

severely punished by the judges. We cast out again, our hooks being baited by young herrings cut in two. There was a general complaint this year of the scarcity and dearness of bait. There are men whose only business is to catch bait and sell it to the fishermen. My host had a small steamer employed for this purpose during the fishing season. When the fishing ground is near the line, fishermen return to the shore and go again, and so do also those with nets.

"Another sail, two hours long from Henningsvær, brought us to Slamsund. My object in coming to Slamsund was to visit Herr M-, a celebrated manufacturer of cod-liver oil, which enjoys such great and well-deserved reputation in the United States. The room where the oil is made was not very large, but everything was extremely clean. Several men were engaged in separating the good livers from the bad; all were fresh from fish caught that day. The fat and healthy livers were whitish, while the diseased ones were greenish, and the lean ones red. I was surprised to see the number of diseased and lean livers. The season for the best ones would soon be over, and it happens that the cod arrive at Lofoden when their livers are in the finest condition. The men were very particular in selecting the choicest kinds. After they had been assorted they were put into a large tank, washed thoroughly in warm water, and then placed over an open wire net to let the water drip away. I noticed that extreme care was taken in all stages of the preparation of the oil. There were five large, high, rounded kettles or vessels, surrounded by steam at a pressure never exceeding five pounds. By this process the livers boil very slowly for eight hours, after which the oil is filtered twice through cotton, and put in large tin vessels tightly soldered. The product was clean and white, and appeared to me perfectly pure; but the process does not end here. The oil is shipped to Christiania, where it undergoes chemical treatment which frees it from the microscopic globules of blood, and from stearine. It is then filtered through paper, and is ready for the market. Some sort of brown oil is made from most of the residue, and what is left after this is manufactured into a fertilizer, said to be very rich. The process has nothing of the repulsiveness of the methods by which brown oil is usually made, namely by letting the livers rot, skimming the oil, and afterwards boiling it.

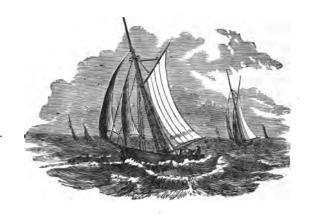
"There is a church at Henningsvær, and, during the short fishing season, a resident clergyman. On Saturday no nets or lines are put out, the law not allowing sufficient time in which to return to raise them on Sunday. Buying and selling cease; the captains come ashore; the fishermen shave themselves and put on their best clothes; and all feel that a day of rest has come.

"The fisherman's life is arduous. At dawn of day he goes out, and, when he has to row against a head wind, often comes back tired and weary. On their return, after the first meal, all are very busy outside; those who do not clean and prepare the fish, cut bait for the lines, replace the last tackle, and repair the nets.

"I left the Lofoden on the thirteenth of April, bidding farewell to those who had been so kind to me. The deck of the vessel was literally packed with fishermen, and their heavy wooden chests were piled everywhere; so also were numerous nets and lines and cooking utensils. Everyone was good-natured—laughing, talking, and looking forward to the Finmarken fisheries. They were going to sleep wherever they could on deck, for hardly any of them had taken second-class tickets; they wanted to save their money, and were satisfied with third-class. In a few days the Lofoden would be entirely deserted—boats and fishermen gone—and on the shores of many an island not one would be left to watch the sea."

I quote Johnson's New Cyclopedia in summing up this chapter on Norway fisheries: "All the rivers teem with

salmon and salmon-trout; rich oyster beds are found all along the coasts; lobsters of the finest quality abound; the cod-fisheries in Lofoden give an annual return of 9000 tons of dried fish, besides 22,000 barrels of oil and 6,000 barrels of roe, and the herring fisheries along the southwestern coast yield annually between 500,000 and 600,000 tons of fish."



AMERICAN FISH BUREAU.

THE following statements from the annual report of the American Fish Bureau for 1887 are here presented. During the past few years, for the first time in this country, anything like adequate figures and statements with regard to the fishing industry have been presented, and to the American Fish Bureau, an institution with headquarters at Gloucester, it is entirely owing that this state of things has taken place. Below are some of the statements referred to:

THE FISHING INDUSTRY.

"From the most reliable available statistics, we find the fishing industry of North America and Europe gives employment to between 600,000 and 700,000 men and near 150,000 vessels, the total annual products being about 1,500,000 tons, 3,000,000,000 pounds of fish, equal to 150,000 carloads, and would load a railroad train 910 miles long.

"A few of the leading nations that help make up these figures are as follows: The United States, with 101,684 fishermen and 6,605 vessels, not counting the small boats and unenrolled vessels of under five tons. Great Britain is reported with 120,000 fishermen, reporting on Jan. 1, 1887:

England, -			-	-		-		-		-		-		-	57 ports, 4352 vessels.
Isle of Man,	-	-		-	-		-		-		-				3 ports, 305 vessels.
,				-											21 ports, 4459 vessels.
Ireland, -	-	-		-	-		-		-		-		-		17 ports, 521 vessels.

Total - - - - - - 98 ports, 9637 vessels.

"France employs 126,000 persons in the sea fisheries, the annual proceeds valued at \$16,660,000. Norway produces for export \$11,900,000, and for home consumption \$3,500,000 to \$4,500,000 worth of fish. Italy produces \$9,520,000, Russia \$16,600,000 annually. Germany is reported as receiving annually \$18,326,000 worth of fish, two-thirds of which were herring."

THE NEW ENGLAND FISHERIES.

"The history of the New England fisheries is one of peculiar interest. In its earliest days almost the sole industry of the colonies, the salary of the minister, the debt due the merchant, in fact, most of the obligations being settled for in the staple commodity, fish.

"Probably few of the consumers, as well as many that from the agitation of the fisheries, take an interest in them, could locate, or have much of an idea where the bulk of the salt water fish that supply the nations are caught. They little think of the fisherman as sailing from home for weeks or months ere his return, as being from 150 to as far as 2400 miles from home before he enters his little dory, and there, often 100 miles or more from the nearest land, begins to take his cargo. Yet such is the fact.

"In the early history of the fishing industry of New England, the business was carried on in small vessels or boats, that from the abundance of fish had no occasion to go far from shore. In those days the near shore fishing grounds along the New England coast were well supplied with all the desirable varieties of salt water fish, and were of great value to the producer. The same, probably, might be said of the near shore fishing grounds of the British Provinces at that date.

"As far back as 1818, the year of the treaty of London, very little attention was paid to the mackerel fishery, only 30,969 barrels being packed that year in Massachusetts, and for ten years—1809-1818 inclusive—the total pack was only 180,492 barrels.

"In 1819, the mackerel fishery first makes much of a showing, the pack of Massachusetts being 100,111 barrels. Fluctuating, yet growing in importance up to 1831, in which year Massachusetts packed out 383,548 barrels, an amount that has never since been reached by this state in any one year.

"As is well known, the mackerel is a migratory fish; while in one or a series of years it is found in immense quantities in one part of the North Atlantic ocean and its bays, another year, or series of years, it will be found hundreds of miles away. No part of the North American continent can justly lay claim to this fishery.

"In those early days, and up to about 1870, the mackerel catch was made with hook and line, as these could be used near shore. Often a considerable part of the catch was made thus. Since the introduction into general use of the purse seine, in 1870, we find nearly all of the mackerel catch has been made on the fishing ground of no nation, but on the high seas, or more than three miles from shore. Of late years mackerel, in common with other varieties of fish that once were found plenty near shore, are now seldom found in abundance within three miles of land, and oftener wide out, or on the more distant fishing banks. The fact remains that, while the near shore fisheries of New England and the British provinces are to a small extent valuable to the fishermen adjacent to them, they are not to others, the amount of fish there caught, compared with the aggregate catch, being insignificant, the bulk of the catch being taken on the distant fishing banks of the high seas."

THE FISHING GROUNDS.

"The fishing grounds of the western Atlantic are the largest and most valuable in the world. They quickly attracted the attention of the early explorers who visited America, and who reported to their countrymen the extraordinary wealth of the western seas. It is a well established historical fact that the colonization of North America was largely due to the interest felt in the possession of the fishing grounds, and for their possession or retention fierce wars were waged between the French and English for upward of two centuries; and Sabine holds the opinion that the disputes and contentions which originated in the struggle for obtaining exclusive rights on the fishing banks by the English colonists led ultimately to the revolutionary war and the birth of a new nation.

"The Biscayan fishermen have a tradition that Newfoundland was visited by their countrymen prior to the time of Columbus, but this story is improbable. The French fishermen were, however, the pioneers in the cod-fisheries of the western Atlantic, and it is fairly certain that as early as 1504 the Normans and Biscayans knew of the Newfoundland fisheries. Within 25 years of the discovery of America by Columbus the crews of fifty ships, Basque, Norman, Spanish and Portuguese, were plying their lines on the great banks of Newfoundland—more than 300 years ago. In 1577, the French had employed not less than 150 vessels in the American fisheries, and we are told that 'they prosecuted the business with great vigor and success.' From that time to the present the fishing banks of the western Atlantic have been visited by fleets of varying magnitude, and they have proved an unexampled storehouse of wealth in supplying innumerable millions with food.

"These banks, of which we have so hastily and imperfectly sketched the early history, constitute a chain of submerged ocean plateaus elevated considerably above the surrounding sea bottom, and extending from Cape Cod to and including the Flemish Cap, of which they have an unquestioned right. Or, if we include the south shore of Nova Scotia off the eastern coast of Newfoundland. While there are cod fishing grounds of some importance nearer the land, both off the coasts of the United States and the British provinces, these ocean banks generally are at considerable distance from the land, and therefore free from any national jurisdiction. They are the natural and favorite resort of the cod and halibut, and, as previously stated, constitute the richest and most unfailing resort for fishermen which is known to exist.

LOCATION OF FISHING GROUNDS.

"According to the United States fish commission, the area of the off-shore banks, exclusive of the fishing grounds off Greenland and Iceland, is 73,123 square geographical miles, all of which, being on the high seas, are under the control of no nation, and free to all.

"Capt. J. W. Collins of the United States fish commission, in an article lately published in the Century, gives the area and location of the mackerel fishing grounds as follows:

"'According to a report on fishing grounds of North America, prepared by the United States fish commission, the total area of the mackerel fishing

grounds off the eastern coast of the United States is 56,000 square geographical miles. Here, in our own waters, the most extensive and valuable mackerel fishery of the world is carried on. In addition to this, our fishermen have the right to fish in the waters of the gulf of St. Lawrence, outside the three-mile limit; and thus is opened to them an additional area of 15,200 square miles, making a-total of more than 70,000 square miles over which they have an unquestioned right to prosecute their operations. Now, if we estimate the inshore waters frequented by our fishermen in pursuit of mackerel, we will be able to get an idea of their relative importance, always supposing that the fishery can be prosecuted as well inshore as it can off, which is not the fact, as will be shown hereafter. The north shore of Prince Edward Island and Cape Breton are the localities in the inshore British waters which are now chiefly visited by American vessels in pursuit of mackerel. The total area of inshore waters in these regions commonly resorted to by American fishermen does not much exceed 775 square miles (if we follow the coast line), or about 1 per cent. of the area of the mackerel fishing grounds to and Cape Breton, the east side of Cape Breton and what is known as the "West Shore" - from Point Escumenac to Point Miscou - in the Gulf of St. Lawrence, we shall have a total area of 2004 square miles. But a simple statement of the area of these inshore waters over which alone England has any control can convey little idea of their value. The mackerel fishery is now exclusively prosecuted with the great purse seine instead of by hook and line, which were formerly used. Therefore, the larger portion of this inshore area of water being too shallow and the bottom too rough to admit of the successful manipulation of the fishing apparatus, it is comparatively seldom that any fish are caught near the land. On the southern coast of Nova Scotia few fish are taken by American vessels, and these only during their migratory period. Thus it will be seen that the available area inside the limit is exceedingly small.

"'Then, too, the change in the method of fishing has, in recent years, led to the almost practical abandonment of the mackerel fishery in the Gulf of St. Lawrence. Occasionally a considerable fleet enters the gulf; but since the results have generally been unsatisfactory there have been seasons when only a very few vessels went there. It is true, perhaps, that the mackerel being a remarkably erratic species, its movements cannot be predicted from year to year with any absolute certainty.

"'The results obtained in the past ten years, since the universal employment of the purse seine, may serve, however, as a fair basis in judging of the future. It is an historical fact, now well established by the most accurate and careful investigation and inquiry, that the catch of mackerel in the Gulf of St. Lawrence, not to speak of the inshore waters under British control, has been of comparative insignificance during the last decade. And even under the most favorable conditions, when the catch there has been exceptionally large, as in 1885, the total product of the Gulf mackerel fishery did not amount to more than 8 per cent. of the entire catch of the New England fleet. Of this, less than one-third was taken inside of the three-mile limit."

WEIRS AND TRAPS.

"Yearly this branch of the fisheries grows in size, importance and value. In view of international complications, it is of especial service in furnishing plenty of bait to the New England fishermen. This they have been amply able to do during eight months of the past season that they have been worked. This fact should be borne in mind by the enemies of the weirs and traps, that annoy and threaten their business, if not their extermination, through legislative action. Weirs are put down in Narragansett bay as early as May, and fished up to the 1st of November; 70 of them, located in Rhode Island, report their catch the past season as follows:

18,000 barrels scup. 2,500 barrels butter-fish. 1,500 barrels tautog. 3,000 barrels sea bass. 200 barrels flat-fish. 1,400 barrels mackerel.

"At times the weirs were full of squid, often thousands of barrels that were turned loose for want of customers.

"The weirs of Cape Cod, from their nearness to the fishing grounds as well as the home port, are chiefly resorted to by the fishermen. They are put down in April and taken up in December. The past season the catch of herring was not up to the average, but was large in squid from June 20 up to Sept. 1. A large proportion of the catch of squid was turned loose from want of buyers. Aside from bait, the weirs take more or less cod, pollock, flounders, blue-fish and mackerel; the catch of the latter is usually from May 25 to July 30, and from Oct. 1 to Dec. 10, with a less amount between those dates. Advices from along the coast as far as Southwest Harbor, Me., report an abundance of herring all the season. After furnishing the fishermen and packers, thousands of barrels were turned loose from want of buyers.

"Connecticut has heretofore been neglected in the annual returns of the New England fisheries. In past years it could make a large showing in the cod, mackerel, whale and seal fisheries. Of late years the productions have been largely represented by the oyster and menhaden fisheries. New London has for many years been largely interested in the food fisheries, having in 1854, 124 sail in the cod fishery; in 1886, 42 vessels in cod and other fisheries, two in mackerel, and six steamers in the menhaden fishery. Thirty-four sail of good sized vessels were engaged in the cod and halibut catch on George's banks and off Nantucket shoals, nearly all of them being welled smacks, taking their catch to the New York market alive; there it is transferred to cars located in the docks at the fish markets, and sold to the purchaser fresh as he pleases, alive or dead. The catch of the New London fleet the past season aggregated as follows:

1,086,010 pounds	-		-		-		-		-		-		-		-		-		 Codfish.
367,600 pounds		-		-		-		-		-		-		-		-		-	- Bluefish.
59,600 pounds	-		-		-		-		-		-		-		-		-		 Swordfish.
268,950 pounds		-		-		-		-		-		-		-		-		-	 Halibut.
116,750 pounds	٠.		-		-		-		-		-		-		-		-		 Sea bass.
12,100 pounds		-		-		-		-		-		-		-		-		-	Flounders.
700 pounds	-		-		-		-		-		:		-		-		-		Striped bass.
12,500 pounds		-		-		-		-		-		-		-		-		-	Red snappers.
17,750 pounds	-		-		-		-		-		-		-		-		-		- Tautog.
275 barrels		-		-		-		-		-		-		-		-		-	Mackerel.

IMPORTANCE OF THE FISHERIES.

"Probably no industry, with equal capital, gives employment to and supports so many persons as the fisheries. The last official returns for the United States are as follows: Number of vessels, 6605; tonnage, 208,297.82; persons employed, 131,426; capital invested, \$37,955,349. The New England states make the following report for the past year: Vessels engaged in all branches of the fisheries, including oyster and whaling, 1956; tonnage, 115,130; men employed, 17,996.

	Whale	Cod	Mackerel	
Year ending	fisheries.	fisheries.	fisheries.	Total
June 30.	Tons.	Tons.	Tons.	Tons.
1860	166,841	136,653	26,111	329,605
'6 1	145,734	137,846	54,795	338,375
'62	117.714	133,601	80,596	331,911
'63	99,228	177,290	51,019	267,537
'6 ₄	95,145	103,742	55,499	254,386
' 65 *	90,516	65,185	41,209	196,910
'66 *	105,170	51,642	46,589	203,401
'67	52,384	44,567	31,498	128,449
'68	71,343	83	3,887	155,230
'69	70,202	62	2,704	132,900
' 70	67,954	91	:,460	159,414
'71	61,490	92	,865	154,355
72	51,608		,545	149,155
'73	44,755	100	5,519	154,274
'74	39,108	78	3,290	117,398
,75 ,76	38,229	8c	,207	118,436
'7 6	39,116	87	,802	126,918
'77	40,593	91	. ,0 85	131,678
'78	39,700	8€	5,547	126,247
'79 ' 8 ⊙	40,028	79	9,885	119,913
' & o	38,408	7	7,538	115,946
'81	38,551	70	5,137	114,688
' 82	32,802	77	7,863	110,665
'83	32,414	9.	5,038	127,452
'84	27,249	8:	2.940	110,189
'8 ₅	25,184	82	2,565	107,749

^{*}The tonnage for 1865 and 1866 is partly by new measurement and partly by old.

Note.—The mackerel licenses have not been issued separately since 1867, when a general fishing license was provided to replace cod and mackerel fisheries.

THE WHALE FISHERIES.

"The total number of vessels of all classes engaged in the business is 121, of which 19 hail from San Francisco, and all are engaged in right whaling. The decrease of tonnage during last year was 827 tons. The present tonnage of the entire fleet is 28,291, of which 6,500 tons are now in eastern ports, and over one-third is offered of this tonnage for sale. The North Pacific fleet comprised 38 vessels. The total catch yielded about 20,000 barrels of oil and 309,000 pounds of whalebone. The Arctic fleet took 153 whales, as against 222, in 1885. The season was an unprofitable one. Imports for 1886 were:

Sperm oil, 23,312 barrels; 'whale oil, 27,249 barrels; whalebone, 352,590 pounds. Exports were: Sperm oil, 3,118 barrels; whale oil, 18,253 barrels; whalebone, 184,511 pounds. Stock in the United States Jan. I, 1887: Sperm oil, 18,210 barrels; whale oil, 9,270 barrels; whalebone, 322,900 pounds. The average price of whale oil during the year was 33 cents; sperm oil, 74½ cents; whalebone, \$2.73. These statistics are from the 43d annual review of the whale fishery of the United States, published by the Whalemen's Shipping List of New Bedford."

MENHADEN FISHERIES.

"Several persons claim to be first in producing oil from this little fish, but the most reliable report says: 'About the year 1850, Mrs. John Bartlett of Blue Hill, Maine, while boiling some fish for her chickens, noticed a thin scum of oil upon the surface of the water. Some of this she bottled, and, when on a visit to Boston soon after, carried samples to Mr. E. B. Phillips, one of the leading oil merchants of that city, who encouraged her to bring more. The following year the Bartlett family industriously plied their gill nets and sent to market 13 barrels of oil, receiving \$11 per barrel, or \$143 for same. Mr. Phillips gave them encouragement, furnishing nets and large kettles, which were set up out of doors in brick frames for trying out the fish. Thinking that much oil was thrown away with the scrap, the idea of pressing the refuse was suggested. This was at first accomplished by pressing it in a common iron kettle, with a heavy cover and a long beam for a lever; afterward, by placing it under the weights of heavy rocks, in barrels and tubs perforated with auger holes.'

"From such a beginning, and with varying fortune, has the business grown that now represents between \$1,000,000 and \$2,000,000 of capital, employing nearly 100 steamers and thousands of men. The report for 1884 and 1885 is as follows:

	1885.	1884.
Number of factories in operation -	50	52
Men employed	2,064	2,114
Sailing vessels	84	157
Steamers	78	59
Fish caught	479,214,415	858,592,691
Gallons oil made	2,346,319	3,722,927
Tons dried scrap made	33,914	58,438
Tons crude scrap made	7,225	10,430
Average yield oil per 1000 fish	4 ¼ gls.	4¼ gls.
Capital invested	\$1,314,500	\$1,534,756

[&]quot;The aggregate annual catch ranges from 1,750,000 to 2,250,000 barrels of fish.

"Menhaden continue to draw the northern line of migration at Cape Cod, seldom being found north of there. The large importation from France and England, at a very low duty, of de-gras, which is said to be a much inferior substitute for oil, and nitrate of soda from South America as a substitute for fish guano, is seriously injuring this valuable home industry.

OLD MONHEGAN.

SPECIAL CORRESPONDENCE OF BOSTON HERALD.

Monhegan Plantation, Me., Aug. 31, 1886. topography of the coast of Maine is unique. You can sail into a new world every day, for the course of the indented shores covers 2500 miles, which a direct line would limit to less than 300. And the long reaches of white sand beaches, which gleam and glitter in the sunlight every. where in the United States, are almost never seen on the Maine coast, especially about the islands. Here we find great sloping shelves of rock worn smooth by centuries of surf irritation: craggy, broken ledges, caverned and seamed, and always sounding with rebutting rush the dirge of an eternal element; or huge bowlders and outlying rocks, rearing like guards against incoming waters. The islands scattered along the shores number hundreds. Monhegan stands sentinel over all, the first sighted as the coast is approached. It has been fittingly called the "Keystone of New England." Many miles from the main, it looms from the dark ocean a mighty granite cliff, where the sea fogs pitch their tents and mists complete the isolation. You are as much upon the ocean as if upon a ship, barring the tossing. You can live here almost as exclusively as if upon another planet. The deep, compressing waters, heaving as from the beginning "since first the

spirit of God moved upon the face of the waters," with the glowing, tonic atmosphere and influence, exulting and saturating the sober senses, envelope the busy thoughts of cosmopolitan conflicts with the indefinite mood of a far distant and troublesome dream. Here the sojourner finds nothing whatever resembling the typical summer resort. The novelty, strange leisure and sweet enjoyment at such a remote corner—though ambition would not long covet it give the simple fact of living much of grateful content, and the restfulness is profound. We wake to the freshness of each sunny morn with the feeling that it is made for the first time. With the whole Atlantic murmuring in our ears, we fall asleep letting all sombre cares slip beneath the mighty waves and beyond the obscuring horizon. And we recognize the benediction of that eternal harmony as never remembered within the contrasting world of bricks.

Where is Monhegan? Take a map of the Maine coast and look for the outermost island, and twenty miles southeast also of Pemiquid, the island is noted. From the beginning of New England history, and before the prilgrims had landed at Plymouth, the island had become a noted fishing station, and was the seat of the first fishery in Maine, and the home of fishermen. Capt. John Smith was the pioneer, and in his correspondence devoted many pages in discussing the methods by which the fisheries should be carried on. His vessel in 1614 took 47,000 fish. He was shrewd and valued his spoils. "And is it not pretty sport," he wrote, "to haul up twopence, sixpence and twelvepence, as fast as you can hale and veare a line? He is a bad fisher who cannot kill in one day with his hooke and line, 100, 200, or 300 cods." It was from Monhegan came the sachem Samoset to Plymouth, March 16, 1621, with his welcome, having learned some broken English from the colonists at Pemiquid and Monhegan. And a year later, it was to Monhegan that Edward Winslow went for provisions, sure of succor, for his starving band of exiles. The fishermen

would not sell, as their own supply was limited, but gave sufficient to relieve the sufferings at Plymouth. So it has always been the

QUAINT AND PICTURESQUE HOME

to all "they that go down to the sea in ships" and "that do business in great waters!" But its importance has been of trifling interest to those who live within the cities. years ago Mrs. Albee began taking a few boarders - wandering artists generally—but this year fifty or more have sought the extreme quiet and coolness, while excursions from the main coast have been frequent. The only route is, at Bath to board one of the Eastern Steamboat Company's boats which connects the Kennebec with the islands and Boothbay. At Boothbay the mail boat, "Goldsmith Maid," Capt. Humphrey, leaves every Tuesday and Saturday noon, and, if the day be fair and the sea pleasant, a few hours' swift sailing will carry one to the desired haven. You may be seasick, but what of that? We start fairly, passing the summer resorts "Ocean Point" "Squirrel Island" as we round out of the harbor, out beyond Ram and Fisherman's islands, then crossing Lenniken's bay, running between its islands at the mouth. sail on by the Damariscotta river and East Bristol, noting with our glass a new resort just opened at Inner Heron island—but rechristened Summer Christmas Isle—and thence by old Pemiquid - the site of ancient Jamestown and rival of Boston — with its old forts and lighthouse. Beyond Muscongus bay we veer out to seaward. On the eastern side of Pemiquid Point we note the little village of New Harbor (formerly old Popham fort,) which was discovered and settled by Champlain in 1604, with 100 French Royalists. Under Des Monts, it became an elaborate colonial French plantation, and held this part of America by right of France. In 1610 possession was transferred to Fort Popham, now Hunnewell's point, at the mouth of the Kennebec river. Northeast of old Popham

and Pemiquid is Muscongus, or Loud's Island, where was Samoset's royal wigwam and burial place. At the northern extremity are many Indian graves, and at every turn of the sods their relics are unearthed. Our hostess, Mrs. Albee, tells us that her great great grandfather Loud, an Englishman, once possessed the whole island, purchased from the Indians. They considered him a god, as he was of immense size and strength and his voice could be heard a long distance. He is buried on the island, which his sons inherited and afterward sold to many others. As our boat left the island and swept seaward, we curiously watched the approach to the huge mountain of dark rock lying on the ocean beyond, tacking at last into a little harbor between another mountain of stone (Manan) and Monhegan. The harbor, long and narrow and ten fathoms deep, was filled with a hundred boats, dories, punks, yachts, sailboats and fishing schooners. A boat is the vehicle of the islanders. A pony was brought upon the island some years ago, but he soon died of loneliness and laziness. A few cows are kept, many sheep, some poultry and one pair of oxen to truck the seine and luggage from the shore.

Monhegan has a troubled history. It was discovered in 1605 by Champlain and Sir George Weymouth. The first distinct mention of it is in Rosier's journal of Weymouth's voyage, wherein he says that the island was sighted May 17: "because it blew a great gale of wind, the sea was very high, and near night, not fit to come upon an unknown coast, we stood off till two o'clock in the morning, being Saturday." But the island they thought "the most fortunate ever yet discovered." Here they found the fish so plentiful and great, that "one of the mates, with two hooks at a lead, at five draughts together hauled up ten fishes, all were generally very great, some they measured to be five feet long and three feet about." Champlain called the island "La Nef," to signify the appearance of a ship, but it has more the look of a black whale.

Capt. Weymouth, on landing, named it "St. George" and set up a cross as the symbol of Christian possession. But the St. George title has drifted to the adjacent islands and river and La Nef is a forgotten name. In 1614 Capt. John Smith with two English ships took possession. Building boats, he ranged the whole coast to Cape Cod making fresh discoveries and trading with the Sagamore chief Nahanada, who was reigning when Popham and Gilbert came in 1607. Capt. Smith prepared a map, to which he applied the name of New England, and presented it to Prince Charles. On Monhegan he made a garden, as he says, "upon the top of a Rockie Ile in 431/2, 4 leagues from the main, in May, that grew so well, as it served us for sallets (salads) in June and July." The description of "Monhegan" (a corruption of the aboriginal Menahan, "an island,") is as accurate now as then, exhibiting "the remarkablest isles and mountains for landmarks," "a high round isle," with the "little Monas" by its side, "betwixt which is a small harbor, where their ship was anchored," says Smith. The first owner of Monhegan was an English merchant, Abraham Jennings, who bought it of the Plymouth council in 1622. He sold it in 1626 to Messrs. Elbridge and Aldworth for £50. They also bought Pemiquid, which they named "Bristol" after their English town, a title it still retains.

The council granted the title on condition "that they have and will transport, at their own costs and charges, divers persons into New England, and there erect and build a town and settle inhabitants." Mr. Abraham Shurt, a Justice of the Peace at Pemiquid, made out the bill of exchange for Monhegan, the first transaction of the kind known in our commercial history. This Justice also witnessed the first deed of land given in America by an Indian to a white man, the deed given by Samoset and his brother sachem Unongoit, of the country around Pemiquid, July 25, 1625, to John Brown. Justice Shurt is thus pleas-

antly remembered by Bowditch in his novel volume of "Suffolk Surnames:"

TO THE MEMORY OF A. SHURT,

"THE FATHER OF AMERICAN CONVEYANCING,"
WHOSE NAME IS ASSOCIATED ALIKE WITH
MY DAILY TOILET AND MY DAILY OCCUPATION.

It was at Monhegan that the first sermon in English on this continent was preached Aug. 9, 1607, by Rev. Richard Seymour. He was chaplain of the Popham colony that settled at the mouth of the Kennebec river. It was a thanksgiving service, when the crews of the vessels the Gift of God and the Mary and John, who had got separated, met at the island where they landed, "gyving God thanks for a happy metinge and saffe arrvall into the country." It was by the breaking out of King Phillip's war that the island was depopulated. The ruins of a few old cellars still remain, and the present settlers often excavate such relics as quaint Dutch spoons, pipes, firearms, iron kettles and other utensils which have lain for 200 years. An old watch and spoon is deposited with the Maine Historical Society. Indian relics are abundant, yet not one colonist has a vital remembrance. At one neglected part of the island are a number of grave-like depressions, which are supposed to contain their bones. At another point are

TRACES OF THEIR SALT WORKS,

for they made their own salt to cure fish. Two well known New York girls, who are here sketching, are to-day zealously digging over an old cellar, an occasional relic of iron, old bricks and cinders coming to the surface. In the earlier days of Monhegan it was the scene of a cruel massacre. While the men were away fishing, the Indians descended upon the place, murdering the women and children, pillaging and burning everywhere. The burnt wood that is so often dug from the old cellars is regarded

as remains of the dreadful pillage. (It is said that the Indian's exclamation, "Man-he-gone," when telling of the massacre, is the corruption of "Monhegan.")

Previous to the revolution the island was repeopled. 1774 Mr. Trefethern of Portsmouth bought the land for \$1000 of a Mr. Rogers. Then a Mr. Jennings put in a claim of \$1000, which was paid, and in 1807 another claim of \$1000 from the government was made, because of a defect in the title. The island was divided between Mr. Trefethern's son Henry and two sons-in-law, Thomas Orne and Josiah Starling. These had large families and many of their descendants still reside here. In 1880 the island polled 30 votes with 133 population, and was taxed for \$10,305 (the rate of taxation is 21/2 per cent). In 1870 it polled 42, and was valued at \$24,345. The decline of the fisheries of late years and consequent decrease of population, with a total relinquishment of farming operations, has evidently depressed the valuation. Moreover, the song of the "Three Fishers" has been of such frequent recital, off the Georges and beyond, that the young men, and even the older, are finding in the industries of the main a safer song of profit. The island, of about 1000 acres, now contains 30 cottages, with a number of dilapidated fish-houses, a school-house for twenty to thirty pupils, two small stores and a little chapel. In 1880 Mr. McClary, of Philadelphia, learning that the plantation was without a church, gave \$600 for that purpose, under condition that \$200 more should come from the inhabitants. The church was deeded to the Methodist conference. As the Adventists mostly control the religious fervor, they would not help maintain it, so after a struggle of six years the chapel and land has been deeded to the island as the "Union Chapel," and they all worship together. Of course, having no funds they have no pastor. Here is the divine chance for the sacrificing Christian minister who does not care to "lay up treasures on earth." I am always impressed by the simple Sunday service led by Fisherman Davis, and the tiny Sabbath school conducted by Mrs. Stevens, who is also postmistress. They are without singing books and a library, and need much assistance that the outside world can abundantly furnish. The little dwellings are dropped anywhere, only suiting the convenience of being near the harbor and the lines of rocks on which are spread the drying fish, while the larger and woody portion beyond the lighthouse is unsettled. One stony, grassy lane (like that which all remember leads from "grandfather's" pastures to road or barn) twists about among the buildings, sometimes sending off a footpath toward the straggling cots out among the hillocks. The zig-zag fences and capsized stone walls were once built to keep the wandering cows from the little gardens, where the flowers are of unusual beauty. and brilliancy, acquired from the salty atmosphere. All the simple characteristics of very humble living, are visible. When the men are not abroad fishing or making preparations, they idly lie about the fish houses and upon the sand, watching the wind and waves. At the slightest ripple indicating the erratic mackerel or other fish, they are on the alert. They are utterly unable, or, perhaps, unwilling to undertake any other occupation, and the little hamlet wears a

COMICAL ASPECT OF NEGLECT.

But the houses within are exquisitely neat, for the women love their homes, and are seemingly contented and cheerful. Several who have been here from 25 to 30 years tell me that when they visit the main land they are always homesick to return. Mackerel, cusk, haddock, pollock, cod, hake, herring and lobster are caught, and the return of a fishing schooner with yawls piled to the brim with shining fish is a wonderous sight to our unaccustomed eyes. Think of an hundred barrels at one catch! As soon as the boats touch the shore every man is in readiness, for the fish must be salted down without delay. With a keen

knife, several men deftly slit down the backs, throwing them upon a large wooden waiter, each man cutting about seventy a minute. Then they are seized by other hurried men, who, with mittened hands tear them open, "gutting" out the entrails and throwing them into a huge tub of bloody water, from which they are taken by other men and salted down into barrels. These men all carry the weather-beaten, practical, shrewd, humorous manners, characterizing the born native of the seafaring place, and they understand at once the curiosity of an outsider. Try to guy a fisherman and before you are aware you have been the dupe. To "go trawling" is another exciting work to us. Each half-mile of coil is baited with 500 hooks, and as they are drawn in over one side of the boat and the fish taken off they are again baited and thrown over the other side. Several miles of hooks are thus operated upon at one time. But we summer visitors only see from the surface, as the boats go out upon the sea under summer skies of pleasant sunshine and placid waters. So it is difficult to believe in the terrible gales and raging waves, concerning which the risky fishermen can relate almost incredible incidents of terror, suffering and loss. It is a fearful branch of industry. The little they gain is dearly earned from the pitiless sea. Small wonder is it that the fisheries were considered in colonial days so important that, before peace was secured from the mother country, Massachusetts would have no treaty until the fishing grounds were secured to the United States. The fishermen were among the class of persons exempt from the performance of military duty. I know now why the old carved cod-fish was hung in the Boston State House - not as a choice work of art, but to memorialize the determined spirit of our predecessors, that the future generations may be duly grateful. Let us cherish the revolutionary record! Monhegan's prosperity will be lightsome this year. The "hard times" have even reached this obscurity and made times

harder. Nearly 6000 quintals of fish are waiting for a market, and the fisherman counts his profits in vain. As the pogies suddenly disappeared in 1879, so this summer the mackerel have departed. But few barrels have been taken, and conjecture is without answer.

Until three years ago Monhegan was without a postoffice. The mail, which would accumulate at Herring Gut -now Port Clyde - on George's Island, would be brought over by some chance fisherman and distributed at the wharf. They were often without communication with the main land for weeks. Think of going two months or more without a newspaper or letter! Through the exertions of Congressman Dingley a mail was allowed twice a week from Boothbay. Few people can realize the hardships Capt. Humphrey endures in carrying the mail between Monhegan and Boothbay every Tuesday and Saturday forty miles' sailing—for which he is paid \$262 per year. During our stay here we have several times gladly watched the mail boat depart, and impatiently waited two days for its return. One Tuesday last winter, with the thermometer 150 below zero, and the vapor so thick that it was impossible to see, the captain started. The boat had proceeded nearly half-way to Boothbay, when in reefing the mainsail, the man with him was knocked into the water, and rescued with the utmost difficulty, making it necessary to return to port. Wednesday, with the mercury and vapor the same, he again attempted to reach Boothbay, when his bowsprit and jib were torn away by the gale. Thursday his mainsail torn to tatters, and he tossed about helplessly. Friday, while proceeding, he was knocked down by the sea, and the boat nearly filled and swamped with water. Saturday he arrived at Boothbay, having hired another boat to take him there.

On the highest elevation of Monhegan stands a cheerful sentinel, the granite lighthouse, over 200 feet above the sea level. It is a revolving light, a Lepante, the same as manufactured for the coast of France. It is called the "record order" of light, having three concentric wicks, with eight bull's eyes, and twelve open prisms above and five below. Some 800 gallons of kerosene per year are required. Between the flashes the time elapsing is one minute, and they are seen 19 nautical miles. From the cupola we have a magnificent view of the coast of Maine, from Penobscot bay on the east to Casco bay on the west. The Camden mountains back the northeast horizon, and we see Vinalhaven, the Georges islands, Pemiquid, Seguin, the mouths of the Georges, Damariscotta, Sheepscot and Kennebec rivers, and all the prominent coast landmarks. On the ocean side the sea is dotted with white sails laden with the freights of commerce. An evening pasttime is to watch from the rocks the phosphorescent waves breaking against the craggy shore, while above us, the flashes, trailing like comets far from the bright pinnacle, twirl slowly about the island, as if seeking us. This light was established in 1825 and rebuilt in 1851. In 1861 Mr. Humphrey, of Bristol, was appointed light keeper. Two years after, he died, and his wife was appointed in his place, which she filled with perfect satisfaction to the government inspectors until her death in 1880. At present William Stanley is in charge, and Mrs. Humphrey's son Frederick is assistant. neighboring Manana is stationed a steam fog trumpet and a sonorous bell, which often in the night wakes us to the remembrance of others upon the deep. A few years ago an attempt was made to put telegraphic communication between the lighthouse and fog trumpet. The wires were passed to Smutty Nose, a large black rock in Small Harbor, and thence to Manana. After several trials and a waste of \$1000 the unfaithful wires were abandoned. Mr. C. C. Williams, who assumed his father's place, deceased four years ago, is keeper, with his young brother as assistant. Here they dwell on the rocky eminence of 33 acres, where a few sheep exist, 100 feet above the sea,

with the faithful mother keeping their society. Here she has dwelt for nine years. On Manana we were shown the hieroglyphic characters on the rocks, which some antiquarians maintain to be the mysterious writings of the Northmen visiting the Maine coast about the year ooo. As the "prehistoric" inscriptions are apparent in many places along the battered coast of Maine, our prosaic mind interpret only the action of frosts and storms. The wisdom of the savants is too far fetched for us. In a depression just below the lighthouse is the inevitable "God's Acre." Here are headstones, moss-grown and weather-beaten, and the quaint epitaphs which we find in all old graveyards. The oldest incription reads "Phebe Starling, died March 4, 1784," that of a little girl who died of "canker rash," and she was buried by the crew of a coasting vessel, which came ashore to perform the service for the parents. The natural attractions of this island are wonderful, far surpassing those of Mt. Desert. When the steamers can be induced to touch at Monhegan then it will become a resort of much interest. Some of the old people are against an influx of different fish to fry, and refuse to encourage the building of a proper wharf. The high sea walls, almost rimming the island, will make necessary a breakwater, and the expenditure of several hundred thousand dollars as a simple beginning. The whole southern side of the island are sheer cliffs, called Whitehead and Blackhead, of 150 to 200 feet. Grand indeed is the view—impressive as the desolation of death! The isolation, the surging immensity so far below, in front and all about - deep green beneath, deep blue above - arouses a weird, shuddering awe, which remains with us for days. At another cliff, where the sea has beaten out a cave, many years ago a large amount of rock was exploded out to secure Capt Kidd's treasure. The legend relates that the treasure was reached, and they were about to lift a singular iron chest, when one spoke and the treasure vanished. One dear woman assures me that "lots of money is buried on this island," and many others believe it. The proverb runs: "Dig six feet, and you'll find iron; dig six feet more, and you'll find money."

Susie V.



THE GULF FISHERIES.

FOR the last few years we have heard considerable about Snapperfishing, and going out to Pensacola, and so forth; and feeling that some would like to know something more about it we assume the task.

Every winter there are a number of vessels fitted out at Pensacola and Mobile to engage in snapper-fishing, running their fish fresh on ice to Pensacola. Some northern men, knowing this, fitted out vessels at Portland, Me., Cohasset, Mass., Provincetown, Mass., and New London, Conn., taking single dories, and crews ranging from ten to seventeen men, and went south to make money and get clear of the cold weather. The result was, that fish fell in price from five to three cents per pound; and the price of ice has risen to seven dollars per ton. Owing to this, and finding that although not so cold as it was at home, the wind could blow just as hard and raise a worse sea, and that they could be sure of a gale of wind at least once a week, the Northern vessels have dropped off, until this winter there are only two out here, and they are not doing extra well.

Let us take a trip together in the "Paul and Essie" with Captain Benson, a real old veteran:

Leaving the wharf at Pensacola in the afternoon, we drop down to the Navy Yard at Warrington, where we

come to anchor and remain all night, the wind being light and dead ahead from the southeast with a little rain. At daylight in the morning all hands are roused out and find a fine breeze from the northwest, so it is up anchor, make sail, and away we go over the bar with a fair wind, bound down to Middle Ground, a bank about two hundred miles east southeast from Pensacola.

The "Paul and Essie" being a good sailer, we find ourselves in eighteen fathoms of water, with rough coral bottom, in twenty-four hours time, when we at once proceed to try for fish. Every man has his lines and tub of bait ready, and the two top dories all in the slings ready for starting over the side at the first sign of fish.

A man is stationed at the main rigging with heaving lead and line with baited hook attached, and he keeps that going all the time, throwing the lead as much as twenty fathoms ahead of the vessel at each throw, until he gets a fish; then out goes one dory and the rest try their lines over the side (the boat being hove-to), and if fish are found plentiful the rest of the dories are sent out, and the vessel jogs round them until it is time to come aboard for dinner. The fish are thrown down in the hold out of the sun - four hundred being a good morning's catch and, it becoming calm, the vessel is anchored. After dinner the dories go out again, each man going where he thinks best and not coming aboard until he gets a load or darkness drives him. The fish are then iced, the anchor watch set and we turn in pretty well tired out. The next day, it is rough, all hands fish from the rail, until we lose the fish, when we heave up and fish to a drift until we strike them "solid," when we anchor. So it goes on until the barometer falling, and rain clouds making up in the southeast, warn us that we must take advantage of the wind to get on before the dreaded "Norther," which invariably follows rain, comes on. We make all sail and let her go for home, getting in safely before the gale, take out our fish

and lie snugly at the wharf while it blows outside. Perhaps we are not so fortunate, and the Norther catches us before we get in, so we heave to under double reefed foresail and make the best of it, which is bad enough.

Besides snappers, we catch yellow and black gropers, also Jew fish, which weigh sometimes as much as four hundred pounds. We also catch water-snakes, or eels, with a head and bill like a bird, colored black with small white spots all over it. Another fish we catch, which makes the best bait and is also the best eating, the porgie; it is not like the northern porgie, but nearly twice as large, tail forked, nose like a parrot's beak and very prettily colored; body silver gray, tinged with purple and lined with orange toward the head and tail. Mullet and blue fish are obtained in great quantities round the shore by drag seines, not our northern blue-fish, however. These last named fish can be split and salted, keeping fully as well in pickle as mackerel. There is, also, a small silver-colored fish called Lady-fish.

The principal fishing ground lies about seventy-five miles southeast by east from Cape San Blas, in N. Lat. 28 deg. 24 min., West Lon. 84 deg. (14:20.) and consists of coral ridges with about fifteen fathoms on them, sand and mud between, with about twenty-five fathoms. The fish are on these ridges and are caught on handlines, the bottom being so rough as to render trawling impracticable. A drift about east northeast from this gives fair fishing, with about twenty-one fathoms sand and coral.

There is another good spot about forty miles southwest by west from San Blas in N. Lat. 29 deg. (15:35) W. Lon. 85 deg. (35:50) with from twenty-four to thirty fathoms mixed bottom. There are other places, but not so good and are uncertain.

A man makes a great mistake when he comes out here expecting to have a fine, easy time, and a little fortune in the winter. The months of December and January, espe-

cially, are rough and boisterous, not to say cold, but we have had over half an inch of ice on deck already this winter and one snow storm.

However, a man by attending to his business and working in the right way can make wages, but I would advise any man who can make a living at all at home not to come to Pensacola snapper-fishing.

Jas. M. Henderson.



ST. JOHN'S, NEWFOUNDLAND.

FROM THE NEW YORK OBSERVER.

SOME one has wittily said that St. John's "is the fishiest city in the world." This one may well believe when he learns that the annual value of the cod fishery products is upwards of six millions. As we enter the land-locked harbor through the "narrows," Signal Hill, five hundred and twenty feet, on one side, and Fort Amherst Lighthouse, a hundred feet higher, on the other, we are struck with the picturesque approach to the city. Since we sighted land, for many miles we have followed an iron-bound coast, dangerous in the extreme. Giant cliffs three hundred feet high, crowned with fir, threateningly face the sea, almost a solid wall, save as an arm of the sea reaches in now and then, forming a beautiful bay, a few white cottages crouching on the shore. At intervals the rock has been wrenched apart, and in the distant darkness a white ribbon of foam is fluttering to the breakers, a cascade that pours almost perpendicularly to the ocean beneath. Farther on is a geyser, which finds its force and movement in the sea, the tide sending the water up in white jet at intervals. of the estuaries have a charming perspective as pass, a great rock dividing the entrance and the far-off fishing hamlet with its back ground of green. But what a face the cliff has, - grim, stern, unrelenting; like the

Sphinx, telling no tales of the wrecks that have gone down before its eyes!

ISLAND OF NEWFOUNDLAND.

As we look at the map of North America we find that a triangular shaped island, England's oldest colony, lies across the Gulf of St. Lawrence, to which it affords access at its northern and southern extremities. It is the tenth in size among the islands of the globe, 317 miles in length and 316 miles in breadth, containing 42,000 square miles. Its coast line is 2,000 square miles. Five hundred years before the days of Columbus and Cabot the Northmen discovered Newfoundland, as well as some portion of the main land of America. Leif, son of Eric, the Red, discovered what he called Helluland, which, no doubt, was Newfoundland. But it was John and Sebastian Cabot, under "letters patent" from Henry VII, in 1497, who re-discovered the island, and brought it to the notice of the world. He was allowed by the stingy king to go at his own charges, but at last on his return was rewarded with a gratuity of £10 for discovering an island which has brought in millions for years to the English people. It was said of Sebastian Cabot, who died at eighty years, that "he gave England a continent, - and no one knows his burial place." No spot bears his name save a little island on the eastern coast of Newfoundland.

The aboriginal inhabitants of the island were Red Indians or Bœothies. They were originally, doubtless, from Canada, coming by the Straits of Belle Isle. They are supposed to have belonged to the Algonquin branch. There is now in the Museum of St. John's a human skull, the last token of a once powerful but now extinct tribe. It is said Cabot on his second voyage brought away three of the aborigines, and they were kept by the king in the palace of Westminster. They gradually melted away on the approach of civilization. In 1804 a female was taken by a fisherman, kindly treated and sent back loaded with

presents. It was believed that she was murdered by the miscreant who was charged with her protection. In 1819 another female was taken by a party of trappers and brought to St. John's, and in 1823 three more, two of whom died, but one lived two years. There is a pathetic account of how the last traces of the aborigines were found by a party from St. John's, who, in the interest of the "Bœothick Society," went in search of them. The summer and winter wigwams; a wooden building constructed for drying venison; among the bushes of the beach a large and beautiful birch canoe, twenty-two feet in length, but little used, yet in wreck; even a "canoe rest" with the daubs of red ochre fresh upon it. But the Indians themselves were not found, they were all gone to the Great Spirit, and their history is untold.

THE FISHERIES.

The fishing interests of Newfoundland are the great source of its wealth at the present time; that it has undeveloped possibilities there can be no doubt. The interior has not been known until a comparatively recent day. The geological survey, under the oversight of scientific and thoroughly competent men, which is now going on, has been a revelation to the residents of the coast. Farming, lumbering and mining will yet employ thousands of men, and furnish occupation and homes to multitudes of emigrants. Here is virgin soil capable of supporting millions of people; a climate much milder than Canada in the interior. Timber is of pine, birch, ash, poplar, willow and cherry. The sea may yield its millions to the people of the coast, but when the railroad opens up the island the lands will yield millions more.

The cod are taken on the Grand Banks, submarine islands six hundred miles long, and along the coast. The Banks fisheries are chiefly carried on by French and Americans, Newfoundlanders fishing along the shore. It is

estimated there are taken in the aggregate annually 150,-000,000 or 3,700,000 quintals of fish which at \$4 would be \$14,800,000. Thus we see this is a great industry. It has been going on for three hundred and seventy years.

Cold water seas are necessary to the life of the commercial food fishes. They could not exist in tropical seas or in the warm waters of the Gulf Stream. The Arctic current, which washes the shores of Labrador, Newfoundland, Canada and part of the United States, is the source of this vast wealth. Not only its temperature is favorable to the development of the commercial fishes, but it brings with it the food upon which they thrive. The Arctic seas are full of living slime. This becomes the food of minute crustaceans, and they the food of larger fishes. Newfoundland has 2,000 miles of coast washed by this Arctic current, while no other country has much more than half of the amount.

THE YOUNG COD.

These fish do not migrate to the Arctic regions, as was once supposed. They are local in their habits and confined to a limited area. They are governed in their movements by the presence or absence of food, the spawning instinct and the temperature of the water. At the period of reproduction they return to the place of their birth. The cod drops its spawn free into the sea at a considerable distance from the bottom. The spawn does not sink, but goes through all its stages of development, swimming free in the sea quite near the surface. The eggs are transparent, and have a specific gravity so near that of seawater that they They hatch in about sixteen days. float as stated. The young cod in its first year grows to be about a foot in length. The cod taken on the Banks are much larger and nicer than those taken along shore. About thirty of Bank cod when dried make a quintal. The cod begin to appear on the coasts of Newfoundland about June 1st. They are heralded by the caplin, a beautiful little fish

about seven inches in length, which arrives in vast multitudes, swarming in enormous schools. These the cod follow and devour. The caplin furnishes the best bait for the fisherman. Rev. Mr. Harvey, the historian of the island, to whom we are indebted for this resume, in describing the scene when, in a calm moonlight night in June, the fish are plentiful and the waters alive with marine forms, the silvery sides of the cod flashing in the moonbeams as they leap out of the water and dash upon their prey, remarks: -"The world of waters, it would seem, is no more free from terror, pain, torture, than the land. Surrounded by ravenous foes, watching for their assaults, flying for dear life, fishes, it may be easily conceived, form a part of the creation that groaneth and travaileth in pain." The squid follow the caplin, which furnish food for the cod and bait for the fisherman.

They are caught with hook-and-line, seine, the cod-net and the bultow. When the fisherman's boat comes in with the day's catch they are flung on the "stage," a roughcovered platform, projecting over the water and supported on poles, with an instrument called a "pew." They are then seized by the "cut-throat," who severs the attachment between the gill-covering and the belly at a stroke, and from the opening slits the abdomen. He then makes a cut on either side of the head at base of the skull. Then the "header" takes them; the liver is taken out, the head wrenched off, the viscera removed; the tongue and sounds are also taken out. The fish is then passed to the splitter, who places it on its back and holding it open with his left hand, takes a splitting knife with his right and cuts along the left side of the backbone to the base of the tail. The fish now lies open on the table. With a sharp stroke of the knife the backbone is severed at a short distance from the extremity. Catching the end thus freed he lifts it slowly and following along its side with his knife quickly cuts it from the body. It then passes to the "salter," is carefully washed and salted in piles on the floor. After remaining the proper time in salt it is carried to the "flake" to be cured.

Among the industries of Newfoundland is seal fishing, which comes at a time of year when the cod-fishers are not employed, about the first of March. There are employed about twenty-five steamers carrying from 150 to 300 men each. This brings in more than a million dollars, and has amounted to more than a million and a half in some years. It is intensely exciting, but cruel, work; none but hardy and vigorous men could endure it.

The salmon of Newfoundland are exceptionally fine; 20,000 pounds were exported in cans in 1881, and 3,689 tierces; they are frequently so plentiful in the season as to sell for four or five cents a pound in St. John's. They might be a source of immense income to the island if recklessness and ignorance had not depleted many of the rivers.

"The Great American and Short-line Railway Company" have applied for a charter. Their desire is to construct a line from the eastern coast of Newfoundland to a point near Cape Ray, thence a steam ferry to carry mails and passengers near Cape North in Cape Breton, a distance of fifty-six miles, from which point a railway is to be built to the strait of Canso. This being crossed, the railroad system of Canada and the United States is reached. A line of swift steamers is to ply between a port on the west coast of Ireland and the Newfoundland port. Thus, it is thought, two days would be saved and a thousand miles of ocean travel.

When this scheme is fulfilled, Newfoundland, a terra incognita to many, will be opened to the world. The Red Cross Line put on two new steamers last year,—the Miranda and Portia,—iron screws, offering an elegant and well-appointed line for tourists from New York, which make the trip in forty-five hours to Halifax and from Halifax in forty-eight.

The mining interest of the island bids fair to be of great value. It stands sixth now among copper-producing countries of the globe, and yet is but just begun to be developed.

Among the pleasant friendships we made in St. John's was the Rev. Mr. Harvey, historian of the island, who is authority for the facts in this article. He is a scientific gentleman, widely known as a writer, and cordially remembered by those who have had the pleasure of his acquaintance.

I know of no tour of eleven hundred miles which combines so much unique pleasure and perfect rest as the trip to this island in the North Atlantic. The frowning coast was swiftly passed by our good ship, and the *Miranda* was at her pier.— A Country Parson.

THE SHAD RUNNING.

FROM THE PHILADELPHIA TIMES.

THE fisheries lie a few miles down the river from Philadelphia, where the Delaware pushes a beautiful arm into the Jersey shore. During the shad season thousands from Philadelphia, Baltimore, Washington, New York and, indeed, from all parts of the country, are frequently present to witness the "hauls" of the great seine and revel in shad planked in less than thirty minutes after the gleaming beauties have been landed from the dripping nets.

The tide is sweeping in and the shad are running. The gigantic seine, a mile and a quarter in length, averaging 60 feet in width, has been "shifted aboard" upon the square 12-foot stern of a 70-foot rowboat. Manned by a crew of sixteen at their 18-foot oars, and the seine made fast to a hand-end capstan by 300-fathom lines, the seine boat, often lustily cheered by the great crowds ashore, sets out to the south until the slack-line from the capstan becomes taut, when they cast anchor and await the flood-tide signal from old Capt. Gossar from the Point

Here between the crew's picturesque cabin and a two-century-old cottage, worthy a romance or a poem, stands a little hut covering a "tide clock."

Mouldy precedent makes this sacred ground; and, as if the fate of a nation depended upon the exact instant of action, the venerable fisherman, trembling with excitement, gives the signal — a white flag in a clear sky, a heave on the line from the capstan in a fog, and a red light by night. It is a fine sight as the great seine-boat now bears west towards League Island, "raking" or paying off the seine over the stern roller. After one third of a mile has been traversed the seine-boat heads due north for another third of a mile, and thence east toward the landing place in front of the one hotel which has made planked shad famous throughout America. Here upon the beach the seine lines are fastened to a tremendous reel.

At the moment the seine-boat casts anchor and begins paying off the seine, old Capt. Gossar and his land end crew commence hauling in the seine lines at the shore end capstan. Following this is seen a picturesque grouping of men wading waist deep in the surf and along the glistening beach, slowly dragging the great seine north along shore, with many merry "Yo-o-o—ho-o-os!" and much melodic "chantying," so that the "haul" is really begun long before the water end has been given the great two-mile sweep which brings it in shore to its own capstan fastenings.

The busy crews wear "beckets," or loops of netting over their shoulders, to which are attached doubled lines and wooden pegs. Each man scampers into the water to his middle, fastens up his "becket" by loop and peg to the rope-edge of the seine and then heaves ashore right merrily, hastening back to repeat the labor; thus keeping a sort of endless chain of man power in the haul on the seine, from which all sorts of flotsam and jetsam are taken as it comes dripping ashore. At the windlasses in the water, wherever any of these men are at labor, every one is straining his powers to the utmost, for a quick haul after seine-ends are landed is profitable.

The "bag," or say about sixty fathoms of the middle of the seine, contains all the fish taken, among which are frequently found the rock and sturgeon; and as the "bag" now comes speedily ashore, the splashing and cavorting of the gleaming fish, the shouts of the crews, the increasing animation of the lookers-on and the ragged, nondescript craft hovering about from curiosity and for prey, assist in forming as interesting a scene as one could witness.

Market boats are instantly brought alongside; the shad are taken with great rapidity from the seine by hand and in scoop-nets, and inside a half hour—by which time scores of pilgrim epicures are luxuriating over their planked shad taken in that very haul—a steam tug has landed the catch at the old Dock street Market in Philadelphia.

SALT WATER LINES.

Some Gleanings from the Sea. A Poem, delivered before the Farmers' Club, at Andover, Mass., Feb. 7th, 1887, by Joseph W. Smith.

Poets, the proverb says, are born, not made, And I'm convinced the poet's not my trade, Whether by birth or making-neither one-And you may deem it strangest 'neath the sun That I am here, all bubbling o'er with rhyme, To add my quota to your festive time. But many queer things happen now-a-days, And we are found in most incongruous ways; Round posts are placed in holes exactly square, The square posts in the round, seen everywhere. And we are forced, despite our do or say, In untoward positions day by day. We have been told that the surrounding hills Pour out some product in exuberant rills. Which we believe or not-no matter which-But likely not until we prove it "sich." Fair Arlington may yield its milky tide, And Ipswich eider burst the hill's green side, Old Medford from its hidden springs may flow, And Andover has mighty springs to show, Where deep philosophy runs forth in streams, And other springs, perhaps, the fancy deems, And, without any incubating pains That torture bards with offspring of their brains, May it not be that I have tapped some spring And filled my inkstand with the song I sing, Pouring my strains for your uncertain ken, And shed my lay as if I were a hen? From Topics of an agricultural turn, -Embracing everything from plow to churn-Big crops, big steers, big porkers and big schemes With which the farmer's conversation teems. -(Teaming with power more great than hath an ox. That all endeavor to surpass it "knocks,")-I leave the field and seaward turn my face, Upon whose ample breast I take my place,

And guide my plough, with furrows long and deep, Along the waves, majestic in their sweep, Wider and grander their extended charms Than all the compass of your landed farms, And gather crops from 'neath the yielding tide, At once my recreation and my pride.

The morn is fair, haul taut the flapping sall: We spread our wings to catch the favoring gale; The water sparkles brightly at our prow, And joy inspires the heart as on we plough, Leaving the lap of mother earth behind As 't were her children for a "lark" inclined, Dashing the waves aside with rapturous glee, From trammels of the town's observance free. The sea in dalliance bathes our flashing sides, And seeming laughter murmurs in the tides, The glad display of ocean pleading more Than all the humdrum racket of the shore.

But let the novice in his fireside nook
With no fond longing on the ocean look,
For how'er kindly Neptune greets his friends,
To green novitiates he rough treatment lends,
And, making sailors, he commends a cup
Of old school practice in the bringing up.
All love the sea, but those of gentler blood
Were better home than on the heaving flood;
But if of ocean they would have their fill,
'T were wiser far to climb some neighboring hill,
And watch the billows beaming in their sight,
Without a hinderment to appetite.

The killock cast, now drop the tempting line, Inviting denizens below to dine. A treacherous allurement this, no doubt, But as a victual question counted out, When all accord, with sentiment and wish, To leave the matter wholly with the fish. A bite!-all scruples quickly disappear, As o'er the rail the mammoth cod we rear, And every thought compunctious now is hid Within the limits of the fisher's kid. The farmer may enjoy a triumph keen When some new product of his skill is seen, The merchant gladden o'er his profits snug, The savant glow with some new plant or bug, The grave philosopher in brighter light May joy in some old truth set nearer right, The maiden glory in her new caught flame, The matron smile approval of the same, But none, with full attainment of their wish, Can rival his who takes his first cod fish.

E'en wise professors, learned in the schools, Forget sedateness and collegiate rules, With the first fish exhibiting a joy That beats the glad exuberence of the boy, Whom he'd chastise for half the wild offence That he commits in his delight intense.

As hand o'er hand the festive fish are drawn, No conscience tender need be put in pawn By any story that the credence tries, For all fulfill the complement of size, And, if exaggeration 's used at all, It must, to be believed, make fish more small!! How they come in! What monsters do we pull! All twenty-pounders, and the kid is full; And there is one, full fifty pounds, I'd say, The biggest yet—by George, he's got away! Fifty, said I?—I'll set him twenty more, And then the figure is quite low I'm sure,

A scent pervades the air—a pungent smell— That fishers and their guests know very well. Which blends in unison of land and sea, An epicurean sweet mystery, The onion dominant, in presence there, That with the strongest perfumes may compare. A flagrant outrage often deemed at home, But fragrant out upon the ocean's foam, Where the grand chowder magnifies its claim. As chief of stews, to epicurean fame. To Yankee taste the chowder holds a lot, That's not surpassed by haggis to the Scot, But ne'er so grateful as when, on the sea, Al fresco serving gives it poignancy. I've heard it said that vessels, outward bent. Will leave their course to catch the chowder scent, As from some fisher's deck it may ascend. And on the wind to their glad noses wend, (Reminder of the land from which they part), The ne plus ultra of the cooking art.

Now clouds the sun, and in the darkening west An angry looking squall makes manifest, And muttering thunder, heard above the sea, Betokens elemental anarchy. The winds released rave o'er the darkened main. And our good vessel chafeth at her chain; Now drenching pours the rain with furious night, Shutting all trace of neighboring land from sight, While howling o'er the waves the tempest's wail Proclaims the struggle of the hostile gale. The fisher heeds not the ferocious din. Save to make sure his anchor, and turns in. To wait the clearing of the summer sky, That well he knows will be along "by 'n by," For, like the sea-birds, he the warning tells And in all sea philosophy excels.

But not alone the cod and smaller fry Content the fisher, with ambitious eye: His the impulsion and his warmest boast To meet the sword-fish—mofiarch of the coast, Who, foe to all (the finny tribe his prey), Has drawn his sword, and thrown the sheath away,

His bannered fin, of buckaneerish black, Swinging deflant from his warlike back. One glance alone—the fisher swiftly steers To where, above the wave, the fin appears, And, mounting to the pulpit's toppling site, His trained eye seconding his muscle's might, He drives the iron through the monster's side, Who darts away like lightning 'mid the tide, Feeling the barb, but vain his mad essay From his approaching doom to get away. The boat is manned, the tub of lines bestowed, And on they go like racers o'er the road! The stricken fish his fate impending feels With his brisk foeman close upon his heels. 'Till, his endeavor counting him as nought, He yields to the conviction that he 's "caught," Weakens and weakens in his dying strait, And yields him to the certainty of fate-Unless, perhaps, enough of life remains To put the fisher to the utmost pains, And, by a sword-thrust or malignant blow. Treats his pursuer to an overthrow, Who, ere he has a chance to wink or think, Finds himself floundering in the briny "drink." Hunters may seek to kill the mild-eyed deer, The timid tenants of the woodland sphere, But here upon the ocean's broad expanse, The fisher with his nerve-directed lance. Findeth a foeman worthy of his steel, And risks his life the victory to seal.

But not exclusively the fisher's art Captures the fancy and controls the heart. The yachtsmen with the fishermen divide The honors of the everlasting tide, And every water exultation feels At the invasion of their daring keels. We hail the yacht, enlivening the scene, Where floated once our mercantile marine. Like fairy craft their white sails flout the air. As on they flee in sportive action fair, Cleaving the waves with rapid speed and grace, And winning praise, if not, all times, the race. All cannot win-that 's so, since time began-But all who own a yacht contend she can. Of late how every Yankee pulse was up To keep possession of the champion cup, A nation's honor trembling in the scale, And what if, in the trial, we should fail! Portentous thought! possessing every man, When up popped Burgess and his Puritan. The eagle screamed, the lion roared his bass, And the white sloop retained the cup in place! So when another trial came about-The cup-momentous dipper!-still in doubt, The Mayflower-grand old Puritanic name!-Bespoke the job and took the cupathe same. From the proud note of joy that then went up, It might be thought that all had ta'en a cup

Of something stronger than the silver mug, O'er which the sturdy yachtsmen had their tug. The British lion angrily withdrew, The Eagle screaming up the empyrean flew, Gazing in triumph on the scene below, While the whole nation felt a cheerful glow! Puritan stock, though watered in this case, Will e'er claim standard value on its face, And representatives of Plymouth Rock Will always hold first place as premium stock.

And what a pride the jaunty yachtsman shows, When, home returning, beams his ruddy nose— Perhaps the only trophy he has won, A badge of honor from the regal sun!

I often feel that yachts may be like men, Improving on examples that they ken, And that the dash and vim they sometimes make From their flerce masters they the impulse take. My own sweet, modest, graceful Jennie B., I know takes all her pleasant traits from me. Coyly and kind she courses o'er the main, For no erratic execution fain, Content to yield submission to my wish, If bound for pleasure or to seek for fish; A yacht sedate, with no eccentric pranks, If at her moorings or on Tanto's Banks, I feel secure, with tiller at command, As if with any tiller of the land.

But fearful is the aspect of the main, When, worse than wind, or wave or drenching rain, The fog comes stealing o'er its surface bright. Like a vile thief in the obscuring night. And, ere we half the subtle change may mark, The cloud envelopes us and all is dark!— All gone the land—no vestige can we see— And all around us is one dread mystery. The world shut out, creation in eclipse. The Jennie B. through fog and water slips. A wall of cloud above and all around, An oar's length limit our encircling bound, In lonliest abandonment are we, With no companion but the seething sea, That seems to hold the darkening gloom in fear, And fain would board us for imagined cheer. Oh, what a sense of dreariness prevails As the dense cloud persistently assails! The damp environment our pulses chills, While dread uncertainty our being thrills. Not knowing where we are, or what, or how, Ourselves, alone, of all existence now, Remainders frail of the great world below, Our bound the fog banks that around us grow. The sticky helm scarce heeds the steerer's hands, As on the Jennie B. at random stands.

The while we hear, mid pauses of the sea, Imagined breakers booming on our lee, Giving the heart anxiety intense, With interposing fog's obscuring dense. Drop anchor!—there, kind heaven be thanked, we know There is no fog to worry us below.

All clear again! the sun asserts its power,
The foggy banks before his influence cower,
The anchor raised, and with the grateful wind
We leave our care and grumbling all behind;
More fair the sea to our admiring eyes,
More brightly bend the overarching skies,
More gay the world, late buried in the gloom,
As if 't were resurrected from its tomb,
And on we speed, above the summer wave,
With nothing for our happiness to crave;
The bounding keel responds to urgent sail,
And the pulse quickens 'neath the gentle gale.
Talk of your spans and your equestrian bliss!
What are they to a turn-out such as this?

But there are times that yield not such delight. When fish are scarce, and what there are won't bite, And all the longing of the heart and soul Is centered on the hooks you vainly troll, Giving the fish a chance along your wake, Which they seem very ill disposed to take. This thing occurs when mackerel are shy, Who watch the fisher with contemptuous eye, His lavishment of bait bestowed in vain, While they cavort in schools about the main, Picking a bit with a fastidious look, But e'er avoiding carefully the hook. At such time patience leaves the fisher's breast, And the poor fellow yieldeth to the test, Searches his lexicon for thunderous words Of imprecation on the scaly herds, Who come and go with infinite content, And for his fretting do not care a cent.

Thus did I find it once with Captain Frank, When we of clams had failed a solvent bank, And not a mackerel gave a look or sign Of anything desired in our line. As on we drifted mid a summer day, Across the waters of old Saco Bay. (Who's Captain Frank? My captain and my friend, Born by the sea and there will, may be, end, A student of it since his earliest look, And reads its mysteries as it were a book.) We had discussed the theologic schism At Andover about the catechism. When Captain Frank, in tone chagrined a mite, Failing to get the inkling of a bite, As he drew in his far extended line Said-"This is hopeless fishing, I opine,

"Come, let's no more this dodge persuasive make. "But from the 'old school' new departure take." But with the "new departure" comes a doubt Whether 't is quite so safe to venture out! And if, when gained some other fishing ground, A better catch may there be likely found. But on the new departure may await A change in modus, and a change in bait Adapted to the fishes' change of mind, Which to a different diet is inclined. Shall we depart or not ?- "Ay, there's the rub!"-Shall we lay back, while others fill their tub, Who only share with us the hope and wish For the right grounds and better fare of fish? Are we quite wise in drifting o'er the Bay, While others, just beyond, may win the day, Dropping their lines in ocean deep and wide, And drawing in the treasures from its tide? The fishermen of Galilee, we're taught, Had "toiled all night" and ne'er a fish had caught, But when "The Master" new departure bade, They pushed from land and further trial made. With such success that e'en their nets gave way Beneath the burden of the finny prey.

The safest course we crave—with doubt oppressed—May God, all wise, reveal which is the best!
Therefore we wait, midst clouds and vapors dark,
And drop our anchor to secure our bark,—
Drop also, with the anchor, all our fight,
Hoping and praying fervently for light.

These episodes embodied in my.rhyme,
Are but the sea-shore rote in summer time,
(Where playfully the shore and water meet,
And timid Saunterers gaily dip their feet,)
Compared with interests hinged upon the deep,
The whole world comprehended in their sweep!
The fisher's art a place momentous shares,
But little his for all he does and dares!
Wealth, station, ease upon his toils attend,
And he is but a toiler at the end,
Daring vicissitudes of strife and pain,
A scanty living from the sea to gain,
But swelling coffers, others to possess,
With small return his vacant pouch to bless.

And varied fortunes do the fishers meet!
When from fair Gloucester starts the Georges fleet,
All buoyant with exuberance of hope
Successfully with wind and wave to cope,
The vessels bending to the favoring gale,
While benedictions follow as they sall,
The gleaming waves of Massachusetts Bay
Flecked with their canvas as they speed away!
Forgotten in excitement of his art
The parting sad that rung the fisher's heart—

Those farewells spoken but so little past, Those partings bitter that may prove the last! These all return when out upon the main, And quietude has come to him again. With blissful power, all other thoughts above, Sweet recollections of domestic love! His heart inspired, he feels nor doubt nor fear With those fond benedictions in his ear. Alas! the sequel far too often shows How hope all fied as raging storms arose. And all in vain could sturdy skill contend Against the tempest's power to wreck and rend; And those returning shock with grief the town By tales of how the gallant bark went down. Hark to the widow's cry! the orphan's moan! God pity them-and hearts are not of stone.

And others come not back from other cause: The want of knowledge of the fishery laws; The "three-mile limit" is so dimly shown That they depend on guessing it, alone; The headlands bother them and these they guess, And find themselves in just a "pretty mess," With frowning gun-boats, armed with real guns And manned by Canada's all thundering sons, With customs officers, backed up by laws, Which force the Yankee skipper overawes, But says: "Well, here I'm stuck, but give me chance "To show my heels, and you may go to - France. "I may through ignorance have been amiss, "But don't you think my country'll hear of this? "And then, I guess, you'll have to let me go." But Echo answered, with a wink, "Do n't know."

Now home returning—moves the Jennie B.—
I for the moment leave the mighty sea,
And bring my gleanings on your ears to throw,
Though long—the gleanings, not the ears, you know,—
Showing a little of a wondrous whole,
A subject far beyond my mind's control;
To write of which I'd have again to go
And test that spring, supposed, of wondrous flow,
And dip my inkstand in its running tide,
Which aided me to run this circuit wide.
But now avast! my muse suspends her flight,
And will not budge another foot to-night,
Her sea-legs shaky, and her steps at fault,
She's stiff as Lot's wife from excess of salt.

THE LIFE-SAVING SERVICE.

IN 1883 I published a small book, entitled "Winter Talk on Summer Pastime," the matter being composed, mainly, of yachting and fishing experiences the summer previous, among which I introduced a chapter upon the Life-Saving Service along the coast of New Hampshire and Maine. the present volume, based upon the former, this chapter has been retained, mainly as it then appeared, thus accounting for the remoteness of the occurrences described, but which will always be read as historical evidences of the valor and prowess of the brave men of that past, to be compared with the conduct of those of succeeding time, so meritorious and grand, of which I have herein included a goodly account. I have brought the record of incidents down to nearly the time of publishing my volume, most of them replies to my personal solicitation, and they reveal a quality of merit unsurpassed in the annals of maritime exploit. With the loftiest idea of duty, combining in their conduct philanthropy and heroic daring, these noble sons of the sea will, as has lately been shown in the Vineyard service, give their lives to the cause, the poor return of a scanty salary not half equivalent for their risk; and with an indifferent public appreciation, their virtue is almost literally left to its own reward. A mere mention in the newspapers constitutes their fame, and this, mingled with

account of beach strewn fragments and local incidents, reduces their effort to a commendable but commonplace affair. But they, nevertheless, pursue their round of duty with an earnest will, unheralded and unknown, until it comes to notice through accidents by flood, with loss of life perhaps attending it. I hope that those who read these pages, portraying the dangers as well as benefits attending this service, will take a more kindly interest in the brave fellows who compose the crews, whose gallant efforts have done, and are doing, so much for humanity and the saving of property.

FROM THE "WINTER TALKS."

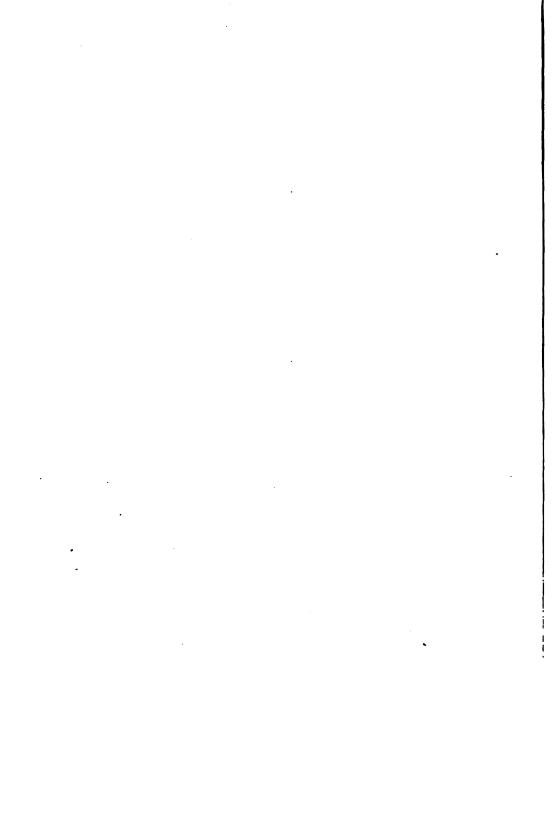
Having reeled up our fishing lines, I will now give a few sketches of the Life-Saving Service. One of the stations is located at Biddeford Pool, and since its organization I have been interested in the men in charge, and mindful of the dangers they may have to encounter. The brief history of this service is replete with adventures, and wonderful achievements in life-saving.

All along our rugged coast are placed life-saving stations manned by stalwart and fearless men, who have followed the sea and know the wants of, and can administer aid to, a fellow man in trouble, as no others can. The life-saving service had its origin in Great Britain. The American life-saving service, under the present system, is ten years old. In the year 1871, Hon. Sumner I. Kimball succeeded to the head of the Revenue Marine Bureau of the Treasury Department, under the charge of which were the life-saving stations. In his brain originated the idea of guarding the entire coasts of the nation by establishing a chain of these stations, to be in charge of thorough seamen, men living in the neighborhood and having a knowledge of the shoals and dangerous rocks along the shore.

A code of regulations was prepared, and so stringent



LIFE SAVING STATION, BIDDEFORD POOL, MAINE-CREW WITH LIFE-BOAT.



were they, that none but the courageous and fearless were fit subjects to fill the positions as surfmen. Political preferment was entirely abandoned. Volumes might be written of the preliminary steps and workings of the institution during the short time since its organization.

A bill was introduced in Congress after the ground had been thoroughly looked over by men competent to have the matter in charge, and in June, 1874, it became a law. The bill provided for the extension of the field of labor, and of the bestowing of medals of honor upon persons risking their lives to save others. It is impossible to make statements to exaggerate a shipwreck; those who have experienced its thrilling scenes can testify to the truth of this remark. The machinery which has been devised is no less remarkable than the successful handling of the same.

There is a room in Washington set apart for all known life-saving implements, and open at all times for visitors. Great credit is due to the daring men who have so many times performed the service of saving life and property.

The English life-boat is in general use in our western lakes, but its heavy weight (two to four tons), precludes its use on the flat beaches and shoal waters of the Atlantic. An American boat of one thousand pounds weight is best suited to the eastern shores. It is placed upon wheels, and drawn to the place opposite the wreck by the men themselves, when no horses can be procured. It requires great skill in launching the boat and afterwards manning it. Perhaps most of my readers have seen a fisherman go over the breakers on a beach in his dory. How skillfully he watches his chances, and his movements must be well-timed, if not his boat is swamped; so with the managing of the life-boat.

It is an imposing sight to see a life-boat launched and skillfully managed through the breakers. Then, when the wreck is reached, no less skill is necessary to keep the boat from thumping in her sides as she lies alongside, or in performing the hazardous undertaking of embarking her living freight and landing them safely upon shore. Many are the number of vessels that have been safely piloted into a snug harbor, while wreck after wreck has been relieved of those imperilled, and afterwards dashed to pieces upon the rocks.

The annual reports issued by the Bureau every year show an admirable record of the saving of life and property.

To those unacquainted with the workings of the institution I would say that suitable buildings are erected at dangerous points upon the coast, containing a large room, with double doors for the life-boat, and all the implements and paraphernalia for the service; a general room for cooking and where the men can sit when off duty; above, a room for the keeper, and a large room for the men, seven in number, and a bed for each man. The duties of the men are as follows: On the coast where the stations are near together, systems of checks have been adopted. At sunset two men start from the station, one going to the right, the other to the left; each travels on his lonely path over loose sand, ragged boulders, or climbing his way along the rocky shore, notwithstanding the blinding snow storms, if in winter, and at any time of the year contending against high winds and rain storms. When men meet from different stations they exchange checks and return to their respective quarters. The night is divided into four watches. The keeper has a log-book, in which he puts down the name of each patrolman and his duty, and has to see that the requirements are lived up to. A record has also to be made of the direction and force of the wind at sunrise, noon, sunset and midnight, together with the events of each day. Every week the keeper is obliged to send a transcript of events, just as they occurred, to headquarters at Washington. As soon as it is ascertained that a vessel is ashore and wants assistance, the keeper must use his judgment whether it is prudent to launch the life-boat.

Upon the lakes, during 1881, some of the deeds of rescue have enveloped the rough figures of the life-saving men in a blaze of heroism. One example was at the wreck of the Amazon off the Grand Haven piers in Lake Michigan — a large four-masted twin-screw steamer, with sixty-eight persons on board, thirty of whom were passengers. The wind and waves were dashing the steamer to pieces, and it was beginning to sink, when, after almost superhuman exertions, the hawser and hauling lines were connected with the foremast, and the life-car was sent out with one of the life-saving crew to superintend operations. In an hour and a quarter every one on board was landed. The first trip of the car brought on shore four ladies and a little girl, the second came with six ladies. It made fourteen trips in all, the last two or three being devoted to bringing ashore the United States mails and some of the baggage of the passengers. A dog was also brought on shore.

These men, who confront danger and face death, ought to receive, at the hands of Government, ample compensation; also social protection in the form of pensions to the widows and orphans of those who perish in the performance of their humane work. More than once has a life-saving crew been lost outright. In 1876, on the North Carolina shore, a surf-boat went out to assist a vessel and never returned.

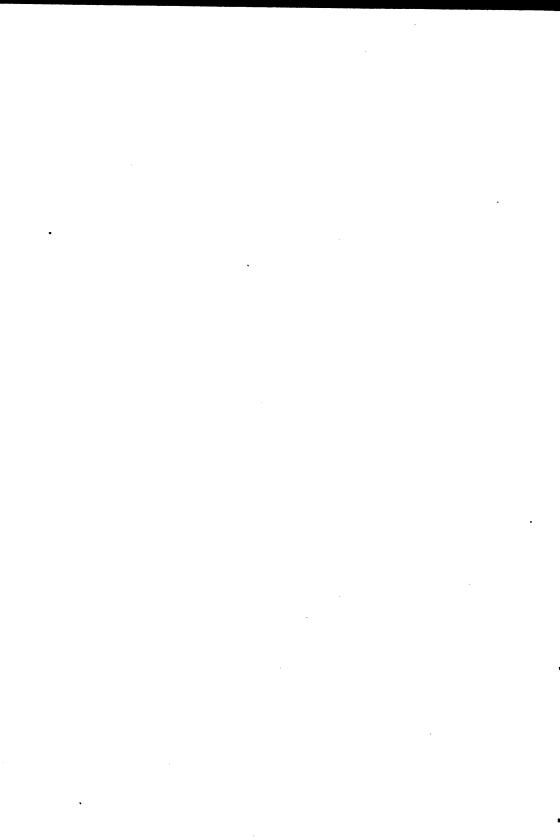
Upon the Atlantic coast it is oftentimes in winter too rough even to launch a boat, and in this case they resort to the life-saving ordnance, which has been greatly improved of late years. The gun in use was cast iron, weighing two hundred and eighty-eight pounds and throwing a ball, with a line attached, four hundred and twenty-one yards. This gives place to the Parrott gun, weighing two hundred and sixty-six pounds, with a range of four hundred and seventy-three yards. The first ball fired in the United States to save life is preserved, in the museum

of the life-saving service at Washington, with tender care. It was used at the wreck of the Ayrshire, on Squam Beach, New Jersey, in 1830, and two hundred and one lives were saved through its means. The Lyle gun is of bronze, weighing one hundred and eighty-five pounds, with a range of six hundred and ninety-five yards. This has superseded all others, and is considered the best in exist-The rocket, so much used abroad, is found to be uncertain. The shot line in use, like the gun, is the result of careful experiment. It is made of strong linen thread, closely and smoothly braided and water proof. It is coiled in a "faking box" so exactly that it will run off freely and fly to a wreck without getting tangled. The gun must be aimed so that the line will fall over the ship; rather a difficult matter to manage in the night-time, and more especially if there is a blinding snow storm. In case of failure the line is drawn in and coiled or laid out in loops upon a "tarpaulin" spread upon the shore, ready for the second trial. The sailors, as soon as the line reaches them, pull upon it till the whip or hauling line - an inch and a half in circumference—is made fast to the shore end of the shot line, which is drawn on board with a pullyblock, or tail-block, and a tablet or tally-board with instructions (English on one side, French on the other) how to arrange it for use. When this is fixed, the surfmen haul upon one part of the whips and send the hawser, which rests on a crotch, quickly erected on shore as a sort of temporary pier. The sand-anchor sustains this slender bridge of rope. It is composed of two pieces of wood crossed at their centres and bolted together, and is buried in a trench behind the crotch and connected with the hawser by a double pully-block. The breeches-buoy is drawn to and fro upon these ropes, bringing one person at a time.

"All this seems very easy upon paper, particularly when the sun shines through the lattice, or the reader occupies a soft-cushioned chair before a warm cheerful fire. But



LIFE-SAVING STATION, BIDDEFORD POOL, MAINE-PRACTICE DAY.



when darkness reigns, and the winds howl, and every drop of spray freezes until the rescuers are encased in ice, and the wreck rises, and rolls, and turns half somersaults, with each gust, in total disregard of the convenience of the surfmen, and a hundred possible mishaps, which break just beyond the borders of vision, the aspect changes and the reality becomes more wonderful than any trick of fancy or fiction."

The use of the life-car involves more labor and difficulty, but is of great advantage when extreme haste is required and many are to be brought ashore. It is a covered boat of sheet iron into which six or seven persons may be crowded at once.

A philanthropic work was commenced by the ladies of America, in 1880, for supplying the stations with warm clothing and blankets, for those who might be rescued from a watery grave. Medals of honor, in gold and silver, are awarded for extraordinary acts of heroism in saving life. The area of the work yearly increases and recommendations for the increase of means should not be allowed to pass unheeded. There is not a department connected with the government, where money is disbursed, that brings any more satisfactory returns.

The Life-Saving Stations in District No. 1, comprising the states of Maine and New Hampshire, were opened for active service, Dec. 1st, 1874. These were five in number, situated as follows: West Quoddy Head, Cross Island, Crumple Island, Biddeford Pool, Me., and Locke's Point, N. H. Since that time two more have been added, one of them situated on Little Cranberry Island, the other at White Head Island, Me. Thus it will be seen that six of these stations are situated on the very roughest parts of the coast of Maine, some of them on islands miles from the main land and far from any habitation. The stations were manned with crews consisting of a keeper, and six men, who went on duty Dec. 1st, and remained until May

Ist, following, making five months' active service. The keepers' salary was fixed at two hundred dollars a year, and he was not only obliged to be at the station during active service, but to have full charge during the inactive season. The crews received a compensation for their arduous task of forty dollars a month! These were, indeed, very small wages in comparison with the work required of them, and when we take into consideration the exposure by day and night they met with, the storms and tempests they encountered, we almost wonder that men were to be had at this price, who were willing to risk their lives to save others.

In 1878 the active season commenced Sept. 1st, and continued eight months. The keepers' salary at this time was raised to four hundred dollars a year, while that of the crews continued as before. In March, 1882, the crews' pay was raised to forty-five dollars a month, and in June following, by an act of Congress, the pay of the crews was fixed at fifty dollars a month, and that of the keepers at seven hundred dollars a year.

The crews of all stations in the district are chosen, as I have before stated, from shore fishermen and boat-men, men who are skilled in boating and who are not afraid of danger when the elements are at war, and they are all obliged to undergo a strict examination, physically, by a marine hospital surgeon, before being allowed to sign articles. If they cannot pass the surgeon they cannot enter the service, as it is imperative to have tough, hardy and sound men for this duty. The keepers must be men who are used to command, must have a fair education, as everything connected with the stations is directly under their charge, and they must render a strict account for all that transpires at their respective stations.

That my readers may understand the dangers and hardships that are encountered by the surfmen at different stations, I will give them the account of the loss of the Kate Upham, as taken from Hon. S. I. Kimball's (the General Superintendent's) report of 1881:

"At 9 o'clock on the morning of October 23, 1880, the weather being rainy, with occasional heavy hail and snow-squalls from the eastward, the two patrolmen on duty from Station No. 3, (Crumple Island, Maine,) discovered a brig, afterwards found to be the Kate Upham, of St. John, New Brunswick, with eleven men on board, in an apparantly disabled condition, about three miles south-east from Red Head, the easterly point of the island on which the station stands. One of them immediately reported the fact to the station. Keeper Hall, with his crew, at once hurried out to the point named, and, after watching the vessel for a few moments, became satisfied that she was in trouble. No distress signals were set; the reason, as was afterward learned, being that the cabin was full of water and the flags could not be got at. As soon as possible keeper Hall hoisted a warning signal from the flagstaff on the Head, but received no answer from the vessel. He now saw that the spars and sails were gone, and lumber from her deck-load was floating in the water as she rapidly drifted toward the rocks in an apparently unmanageable condition. The keeper and his men, finding their signals unanswered, endeavored to attract attention by waving their hats and coats in such a manner as to give the brig's crew to understand that they ought to use all possible efforts to head the vessel to the westward, toward the channel between the Crumples and Great Wass islands. These signals were soon discovered by the brig's crew, and they could be seen endeavoring to pay her off in the direction indicated. Satisfied that he was understood on board the vessel, the keeper directed his men to return to the station and run out the new surf-boat and then wait his further instructions; he remaining meanwhile to watch the movements of the brig. Observing that they had succeeded in heading her for the channel, he ran back to the station and found the boat outside the house in readiness for its perilous voyage. The crew had divested themselves of their heavy clothing and donned cork life-belts, in anticipation of rough work, and, thus attired, they stood leaning on their boat, grimly watching the storm and sea, awaiting the order to start, their minds fully made up, as one said, 'To save the brig's crew or go with them.' The keeper hastily put on his cork-belt, and then giving the word to launch, away they went and pulled for the channel. The wind was blowing with nearly the force of a hurricane, and although the depth of water in midchannel is full five fathoms, the sea was breaking clear to the bottom. As the life-saving crew cleared the point of the island with the boat, they saw the brig just entering the breakers in the channel, and coming like a racehorse, the seas breaking all over her - one, more heavy than the rest, rushing over her stern, as an eye witness said - 'Like a wall of water fully ten feet high, and smashing her two decks together.' The crew of the brig, eleven in all, two St. John pilots being of the number, with scared and anxious faces, watched the almost superhuman efforts of the surfmen to get to their assistance. The boat was gallantly pulled into the breakers and a close watch kept for a chance to approach the brig. Soon the vessel struck

on a small sunken ledge and swung around. This gave the keeper an opportunity, by watching the seas as they tumbled in, to pull up and allow the men on the brig to jump into the boat.

The captain, in the excitement of the moment, missed the boat and fell overboad. He was speedily hauled in, and after a hard and exciting tussle with the sea and wind the entire number were rescued. It was afterward related that the captain of the brig, when he saw the life-saving crew deliberately pulling out into the whirl of waters, exclaimed, 'Good God! what can that little white boat do?' He in good time found out, and when, after an hour's hard pull, he and his men were safely landed on the island, they could not find words to express their gratitude to the crew of the station, nor to extol the 'little white boat,' which, under the management of brave men, had been the instrument of their rescue from a watery grave. They were sheltered at the station two days."

A gentleman from Logansport, Indiana, who was visiting on one of the islands and witnessed the rescue, addressed to Capt. J. M. Richardson, the district superintendent, the following letter.

LOGANSPORT, IND., NOVEMBER 4, 1880.

Dear Sir:—On the morning of the 23d ultimo, I witnessed an act of heroism on the part of Capt. Hall and his crew, of the Crumples life-saving station, which deserves especial mention. The English brig Kate Upham, was driven into the western bay, between Pond Point and the Crumples, during a fearful storm, and struck on a ledge near Fisherman's Island. She had lost her rudder, boats, and was otherwise injured. The brave crew of the life-saving station, with more courage than it required to face a battery, launched their surf-boat and went to the rescue. Standing on Beal's Island, looking through my glass, I had a good view of the surroundings.

It seemed impossible for a boat to live in such a sea. "Tempest tossed" was no longer an imaginary picture. On every hand the sea was breaking, and the life-boat, with her noble crew, seemed but the sport of the angry waves; one moment hidden in the trough of the sea, the next borne rapidly on a vast comber toward the ill-fated brig. While I could but admire the spirit that prompted the daring men to risk their lives in the noble service, it seemed a suicidal attempt; for the chances were greatly against them. By almost superhuman efforts they reached the brig and saved the crew—eleven men. In my western home I learned something of the life-saving service, but never dreamed of its importance until I saw it practically demonstrated a few days ago. The service commends itself to every lover of his race, and should receive the support of the people of all sections of the country. Will Congress render it more efficient by needed appropriations?

We cannot weigh life in the balance with dollars and cents. What better or easier way to expend a fair proportion of our revenue than in the cause of humanity?

Very respectfully,

W. G. NASH.

Crumple Island, on which station No. 3 is located, is a little, rough, rocky island of about thirty acres, eight miles from the main land. The nearest point of land is Fisherman's Island about a mile to the westward, and Great Wass Island, two miles to the eastward. On the upper end of Great Wass Island, about six miles from the station, live a few fishermen and their families. On the lower end is a camp used by Hon. W. G. Nash and others, who are occasionally down there looking after sheep that are pastured on the island. It was at the time of Mr. Nash's visit that the wreck occurred. And it will readily be seen, that this crew were a long way from help, had any accident happened to them. There were eight chances against them to two in their favor, and they knew full well that, if anything befel them, not only the eleven men on the brig, but they also, must perish, for there was no one but Mr. Nash nearer than five miles of them, with no way of being seen or heard. Mr. Nash afterwards stated that he thought the boat's crew crazy to start on so perilous an undertaking, for he expected to see them all drown before his eyes, and he said it seemed as though his heart stopped beating as he watched them pull deliberately into the open sea, in which he thought no boat could live. This was indeed a true act of bravery. And if those who are ever ready to find fault with this branch of service, could have been present, and witnessed this heroic act, they would forever hold their peace, and make no more unnecessary comments on the effectiveness of the lifesaving stations.

By the kindness of J. M. Richardson, Superintendent of Life-Saving stations in District No. 1, I am permitted to give my readers the account of the total loss of the barque Scotia, of Liverpool, England, and the rescue of the captain and crew, fifteen in number, by the use of the breechesbuoy. This account, which is from the keeper's journal, is in his own style of writing, and has never been published.

QUODDY-HEAD, MAINE, Dec. 14, 1882.

"During the severe storm of this morning, T. C. Allen, one of the patrolmen on duty, discovered a barque just as she parted her chains, by the flash of a blue light which she was burning. The light burned long enough for him to see that it was a dismantled vessel and that she was driving towards the shore. He tried to burn a Coston light, but every one in his sack refused to burn. He then ran to the station and called all hands. I ordered him to take another sack, and go to the nearest point where he thought she would strike and burn a light, but got no answer. He could find no wreckage along the shore, so he thought he would travel to the east, and see if she had not struck in that direction.

I arrived on the spot, found Allen's tracks going east, followed for a short distance and met him coming back without being able to discover the wreck. We put down our load, and went to the point where Allen first discovered the wreck, and after a few moments made her out about a mile farther to the west. We then shouldered our loads, carried them over the rocks, through the woods and gullies to the station. We then loaded the cart and dragged it to the wreck, just as the day began to dawn. We then got our apparatus in position, loaded the gun, and the first shot fired went plump one hundred yards outside the wreck, the line falling right among the distressed seamen. The whip line was soon on board, and the hawsers followed in quick succession. The breeches-buoy was then sent off, and two men returned in it. This operation was repeated five times, and ten men were landed. Four men came on shore, one at a time, till all were safe; but the captain did not appear to want to leave the vessel. I got into the breeches-buoy, and went out to the wreck and urged him to leave; but he was bent on saving his nautical instruments, and I took the end of my shot line and went on shore. The captain soon followed.

At I.P. M., the wind changed, and we launched the life boat, went out to the wreck, and saved all there was left of the captain's and crew's outfits. In landing, the boat struck a small rock and stove a hole in her bottom. I patched it with canvas, and thin board, and got a second load from the wreck before dark."

The timely rescue of the crew of the barque Scotia, by the brave boys of Station No. 1, should call forth the praise of all who are interested in the cause of humanity.

The life-saving service is not properly understood. A notion has prevailed, with a great many, that the crews at the stations have nothing to do but to sit idly by, and wear away the long and tedious hours of winter in pleasurable pastime or with folded arms, regardless of those who may be in trouble from the angry waves that dash upon our wintry coast. But this is not the case, and I can assure



LIFE-SAVING STATION, BIDDEFORD POOL, MAINE—CREW WITH MORTAR-CART.



my readers that, when the cold storms of rain, hail and snow, beat upon their dwellings, and when the wind is howling and the very elements seem bent on destruction, the brave boys of the life-saving service are ever watching for those who may be in peril.

All the service rendered in District No. 1, with one exception, has been done with boats. And from the opening of the stations, on Dec. 1, 1874, up to March, 1883, there have been services rendered to two hundred and sixty vessels, on which, including cargoes, there has been property imperiled to the amount of \$2,562,582, and of this sum the seven stations have saved \$1,149,552, or nearly one-half. Some of the stations, as I have said, are miles away from help of any kind; others are off on islands, at the mouth of bays, where, if any accident should happen to boat and crew, it would be sometimes two or three days before any one would find it out. In the meantime the men might drown, or drift to sea and die, and no help reach them until too late. Though some of the crews have had close work, fortunately no accident has happened. And of all the hundreds of lives imperiled, only three have been lost, two of them from the ship John Clark, miles away from any station, and one from schooner Zina, at the season when the stations were closed. The crews of the stations and the revenue cutter help each other many times. When the cutter has close work to do, among the islands, to assist a vessel, the station crew nearest the point where assistance is needed is called upon, and they readily respond, for they are ever ready to lend a helping hand to all within their power.

The following letter from Hon. S. I. Kimball, in reply to one touching the importance of more widely circulated reports of the life saving service, is timely, as well as self-explanatory:

TREASURY DEPARTMENT.

Office of the General Superintendent U.S. Life-Saving Service.

Washington, D. C., January 26, 1883.

JOSEPH W. SMITH, ESQ.,

Andover, Massachusetts.

My Dear Sir:—I thank you cordially for your very kind letter of the 17th instant, expressive of so warm an interest in our little service, which is also a great service, as the little corporal was a great general. I am quite in accord with you in desiring the work we are doing to be well and widely known, but this will come in time, and every year spreads more broadly and deeply the knowledge of the labors and successes of the establishment. The repeated attempts of the Navy to have the service transferred to their control, is an evidence of its conspicuity, and an admission of its value. You are not in the way, probably, of seeing the public journals in masses, and from all parts of the country (as we do here in the office where we use so many newspapers in culling reports of marine disasters,) or you would see how strongly and constantly the service is reported and eulogized. Hardly a week passes in the inclement season when the press has not occasion to record—often to comment upon—the daring rescues of our crews. I think, in short, that things in these respects are pretty much as you would have them, although of course you meet many people who have but a dim apprehension of our broadcast doings, but this is unavoidable, knowledge always percolating slowly.

I deeply appreciate your friendliness to the service, of which you have always given the fullest evidence, and I hope its work will ever be such as to justify your interest and sympathy.

The printed letter in the Methuen Transcript on the life-saving service, by Capt. W. F. Goldthwait, is admirable—perfectly appreciative of station work, and a word spoken in season, besides I thank you for letting me see it.

Our report this year will be late—unavoidably so, but when you receive it, you will see that we maintain our supremacy as life-savers.

With renewed thanks for your letter,

Sincerely yours,

S. I. KIMBALL, General Superintendent.

I append the letter of Capt. W. F. Goldthwait, commended by Superintendent Kimball. The captain is a soundly practical man, fully acquainted with the service, and his opinions carry with them great weight:

THE LIFE-SAVING STATIONS.

Editor Methuen Transcript: — There is some little stir in Congress to have the Life-Saving Stations put under the control of the Navy Department, and to those who have never given this subject a thought it may be well to

call their attention to a few facts in regard to the operations of this branch of service. The Life-Saving Service, as now carried on by government, was commenced a few years ago under many difficulties. Scattering Stations were built along the shores in places supposed to be the most dangerous to navigation, manned by the best men that could be had, and in nearly every instance these men have displayed so much skill, and proved themselves in such manner, that it has called forth the praise of all those who have seen the great benefits derived from it. The result of this has been that the number of Stations have been largely increased on our seaboard, and many have been erected on the Lake shores. This has been brought. about by the untiring zeal of a few persons, although there is not a shipowner in this or any other country, nor a man that follows the sea, nor those who have friends that do business on the "mighty deep," nor who are in any way connected with our shipping interests, but know and acknowledge the fact that the Life-Saving Service has done a great good in saving life and property. But when these facts are known, and Congress has been asked to make appropriations to increase the facilities for saving the lives of those who have been driven on shore and shipwrecked, and to alleviate the sufferings of seamen who have been cast away and lost everything, we are sorry to say, but it is nevertheless true, that only a few of the many that we send to Congress have taken an active part in this matter. And here permit me to give the condensed yearly report of Mr. Kimball, General Superintendent of Life-Saving Stations, for 1881, which I hope will be read with interest and care.

The report says:

"The number of disasters to documented vessels within the field of Station operations during the year was 287. There were 2,268 persons on board these vessels of whom 2,256 were saved and only twelve were lost. The number of shipwrecked who required succor was 450, and to those 1,334 days' relief in the aggregate was afforded. The estimated value of the vessels involved in these disasters was \$3,265,830 and that of their cargoes \$1,492,062 making the total value of property imperiled \$4,757,892, of this amount \$3,109,537 was saved and \$1,648,355 lost.

The number of disasters involving the total destruction of vessels was sixty and the same of the same of the same of the save of the same of th

The number of disasters involving the total destruction of vessels was sixty-seven. In addition to the foregoing there have been fifty-eight instances of disasters to small craft as sail-boats, row-boats, etc., on which were one hundred and twenty-eight persons, all of whom were saved. The property involved in the lattar disasters was \$7,870 of which \$6,470 was saved and \$1,400 lost. The results of all the disasters in the scope of the service aggregate therefore as follows:

Total number of disasters,		345.
Value of property involved,		\$4,765,762.
Value of property saved,		\$3,106,007.
Value of property lost,		\$1,654,755.
Number of persons involved,	•	2,396.
Number of persons saved,		2,384.

There were thirty-nine persons rescued in addition to those saved from vessels (they having fallen from wharves, piers, etc.) who would certainly have been drowned but for the assistance rendered by Life-Saving crews. The investigations held in each case show that the twelve persons lost during the year were entirely beyond the reach of human aid. Although

there were forty-four more disasters than during any previous year since the general extension of the service, the loss of life is smaller with one ex-

ception than that of any year preceeding.

The assistance rendered in saving vessels and cargoes has been very great this year, 298 vessels having been worked off when stranded, piloted out of dangerous places, repaired when damaged, or assisted in similar ways by the Station crews. There were besides seventy-six instances when vessels running into danger of stranding were warned off by the night signals of the patrol and thus probably saving most of them from partial loss or destruction."

It has been said that facts are stubborn things and that figures don't lie, and here we have them right before us. Let them be looked over carefully. Don't lay them aside and give to this subject but a passing thought. Read them over until you thoroughly understand the great blessings derived from this branch of service. The lives of nearly 2,500 persons have been placed in jeopardy and all but twelve saved, during the year, and this by the brave and heroic men that man the stations, and in many cases under the most trying difficulties. Numerous are the instances where they have risked their lives to rescue those who were in peril, and no time have we heard that they shrank from their duty on any occasion. Yet we are compelled to say that they have not always the full co-operation and sympathy of the people in the neighborhood of wrecks and disasters. This has arisen out of petty jealousies and feeling towards the men, they being in the employ of the government which calls for the best men that can possibly be had, and this leaves a chance for some one to find fault, but let us hope the day is not far distant when this fault-finding, which we think has cost some noble lives, will cease, and the full, hearty sympathy of all will be enlisted in this work. But we must not forget the men who have nobly volunteered, without thought of pay or emolument, and have even risked their lives while assisting the keepers and crews of stations to save the lives of others. They deserve great praise, indeed, we cannot say too much for them, and they richly merit the heartiest commendation of all. For, while they do not act in an official capacity, it shows that their hearts are open to those who are determined, and they are ready at all times to do all they can to help others who may be in trouble.

For those who have never seen old ocean lashed into fury by the terrible storms of winter, and who know nothing of the hardships and dangers the surfmen encounter, I will append an extract from Superintendent Kimball's report:

"It is perhaps well known, but probably feebly realized that for eight months of the year the patrols of the Life-Saving Service keep watch upon the ocean beaches from sunset to dawn, in other words, that for hundreds of miles of dark coast beaten by incessant breakers every night and all night long while others sleep, a line of solitary men march and countermarch to and from each other with eyes that ransack the offing for ships in peril. The way is long, dreary, obscure, lonesome, sinister, difficult, perilous. It lies along a waste of foot-detaining sand, whereon to walk is to trudge laboriously, frequently ankle deep, at times to stumble over stones, or wreck-wood washed up by the sea, or to sink suddenly in spots of quick-sand, often the surf shoots seething across the path, or the sentinel wades knee-deep and even hip-deep across inlets which traverse the beach into

the bays beyond, or cuts which trench through into the sand hills. ful lights and shadows of a lantern alone mark the sombre way. Winter and rough weather are the companions of the journey. All natural vicissitudes, all hardships, all exposures known between the autumnal and vernal equinoxes, bitter cold, rain in torrents, cutting sleet, blinding flights of sand and spray, tides that flood the very dunes behind the beaches, the terrible snow storm, the suffocating blasts of the hurricane. There is a case where a man perished in one of these heroic marches. In several instances men have been found fallen and nearly dead by the comrades whom their long absence from the station has sent out in alarmed quest of them. In still others there have been accidents involving broken limbs to the nocturnal journeyers. There is no case where their patrollings are less than irksome and toilsome and they are often hazardous and sometimes fatal. But the duty is necessary in interest of seafarers and nothing so much as this stern and noble watch upon the beaches has contributed to the success of the Life-Saving Service, because its performance involves the early discovery of vessels driven ashore, and the opportunity to rescue their crews before the surf can destroy them. On the other hand, no duty could make higher demands upon the moral nature of the patrolman, for what task can offer stronger temptations for shirking than this gloomy and dangerous tramp, undertaken from a warm station, away from the snug rest of a comfortable bed, into the awful solitude of the winter beaches, perhaps on nights when tempest makes the heavens and the earth tremble? The very companion-lessness of the patrol, which strengthens the temptation to evade duty, offers also ready facilities for doing so, and considerable trouble has been given at times both to the Life-Saving crews and the officers of the service by accusations of unfaithfulness against the patrolman brought by active members of the coast population. It is due to the life-saving watch to say that while in a few cases these charges have almost universally been kept with perfect fidelity, a fact fully established by the record of the prompt discovery of wrecks in nearly every instance, and the swiftness with which in so many cases the rescues have followed stranding, and this fact, remembering that the duty with all its involved demands upon the fortitude, the loyalty, and the intrepidity of the individual, has been performed under no task-master's eye, is not only in the highest degree creditable to the crews engaged, but an honor to human nature.

To the casual reader this may seem to be overdrawn. But he can be assured that it is no mere flight of the imagination, or a fancy picture of Mr. Kimball's gotten up for effect. It is simply a plain, truthful statement of the hardships and dangers the surfmen undergo, to which hundreds of men who live on our sea-coast can testify. These are not all the discomforts that these brave, heroic and self-denying men meet with. Two-thirds of the members of this station have families, and many of them are compelled, by the long storms of winter and the rough weather that follows these storms to be away from their homes for weeks and even months at a time; and it is only during pleasant weather that they can get leave of absence. At no time, except in cases of sickness or death, are two allowed to be absent on the same day, and then only for a few hours. And do we realize, as we sit by our firesides, these cold winter nights, while the storm is raging without, with everything to make us comfortable and happy,—surrounded by those we love and hold so dear, - that brave and noble men, isolated from their families, are constantly on the watch, day and night, braving all dangers, exposed to the fiercest blasts of wintry winds, watching with vigilance and fidelity, and always true to the trust confided to them? To us that have friends out upon

the troubled waters, when storm comes up, who are tossed up and down by the winds and waves, driven on a lee and rocky shore into the very jaws of death, the elements seemingly bent on their destruction—when hope gives way to despair and a watery grave stares them in the face,—it is good to know that brave and true men stand ready to take their lives in their hands and launch forth to the rescue.

Then, how shall we express our gratitude for these brave unselfish men? Language is inadequate. But we are glad to know that while they keep guard through the lonely hours of night, kind friends think of them, and have done much to while away the weary hours, when off duty, with generous donations of reading matter; even whole libraries have found their way into the stations, contributed by men, and women too, whose hearts are always open to the wants of humanity.

As for the change that is talked of, it matters little, we opine, whether the Life-Saving Service is under the control of the naval or treasury department, as long as it is kept up to the high standard of its present management. It would make no difference to us who pulled us out of the water if we were saved from drowning, nor who piloted our ship off a lee shore if we found a safe harbor. The great question is, will it be any better; and if we see no chance for it to be more effectual, is it not better as it is? We believe that at present it is in good hands. The men who are at the head of this department, have worked laboriously, zealously and faithfully, and they deserve great credit for bringing this service so near perfection. They have shown good judgment in selecting district superintendents, and these have been very careful to get nothing but the best men possible for keepers and crews. And when we look at it in the true light, laying aside all prejudice, if we have any, viewing it from the high stand-point of humanity, I think that the verdict will be, well as it is; and it were better to leave well enough alone.

W. F. G.

It has been my good fortune to find an ample illustrated account of the "United States Life-Saving Service," in Scribner's Monthly for January, 1880, three years previous to the date of my book, but containing matter so entirely relevant, in the main, to the subject as it stands to-day, that I gladly introduce it, even though, in some respects, it may repeat descriptions given in the other pages. Such repetition, however, is merely the result of a view of the same subject from different points, and tends to impress it more convincingly. Therefore I make no apology for it, nor for the matter of the date of publication of the article,

as it is so admirably adapted to my use in illustrating the means and modes in practice to-day. Such improvements as have been made since the article was written are alluded to elsewhere, but in all essential features the service remains the same as then.



OFF TO A WRECK.

UNITED STATES LIFE SAVING SERVICE.

BY J. H. MERRYMAN, IN SCRIBNER'S MONTHLY.

IN the principal newspapers of commercial cities there may be seen, under the caption of "Marine Intelligence," or some such title, a column made up of items, set in nonpareil type, like the following, cut from a recent journal:

Bark Halycon (of Bath), Dickinson, from Boston for Perth Amboy, in ballast, went ashore on Long Beach, Ll, A M of Sept. 4. All hands were taken off by the crew of Life-Saving Station No. 32.

Has the reader any idea of the stirring drama a dry paragraph like this may conceal? Let us endeavor to make it apparent.

No portion of the ten thousand and more miles of the sea and lake coast line of the United States, extending through every variety of climate and containing every feature of coast danger to the mariner, can exhibit a more terrible record of shipwreck than the long stretch of sandy beaches lying between Cape Cod and Cape Hatteras. this region the New Jersey coast is notoriously the worst. It has been said that if all the skeletons of vessels lying upon or imbeded in the sand between Sandy Hook and Barnegat could be ranged in line, the ghastly array would reach from one point to the other. Here in 1848, the government placed a few rude huts that formed nucleus from which the United States Life-Saving Service has been developed. These were intended to afford shelter to distressed mariners and to contain boats and such other life-saving appliances as were then known, volunteers from among the fishermen being relied upon to use them on occasions of shipwreck. And right gallantly, in many instances, did the brave beachmen respond, though their undertakings and deeds remain mostly unwritten, existing chiefly in the legends of the coast. Congress continued

small appropriations from time to time, until Long Island was also provided with huts, and a small increase was made to the number on the coast of New Jersey. But from lack of proper direction and want of system the movement languished and subsided. In the meantime, the Royal National Life-boat Institution, a society started in Great Britain under royal patronage nearly forty years prior to our own attempt, had gone on improving its methods and extending its means, and the people of other maritime nations were developing similar humane projects. The hour and the man at length came for our own institution.

In 1871, Mr. Sumner I. Kimball, the present able Superintendent, effected the organization and introduced the existing system.

There are now upon the sea and lake coasts nearly two hundred life-saving stations, the greater number being established at the more dangerous and exposed points. The buildings are plain, yet picturesque, and similar in general dimensions and arrangement, though varying somewhat in outward design, according to location—those near cities or popular watering-places being in keeping with their sur-

roundings and presenting a more finished appearance than those on desolate beaches. Those located in harbors or at inlets are each provided with an annex containing a self-righting and self-bailing life-boat, which cannot be launched from a flat beach on account of its great weight and huge size, objections which are unavoidable in securing the valuable qualities that distinguish it.

The main building has, below, a boat-room and a messroom, or kitchen, each provided with convenient closets and lockers, and, above, two sleeping apartments and a storeroom. The boat-room contains the surf-boat, which is used on flat beaches and in shoal waters. It is mounted on a light carriage, which may be drawn by the crew when draught animals are not available, unfortunately too often the case on remote outlying beaches. Within the same room also stands the mortar-cart, loaded with the wreck ordnance, lines, and various implements, while properly bestowed throughout the apartment are various articles, most of which will come under our notice in the operations to be described. The kitchen and sleeping rooms are sparingly provided with appropriate furniture, while the store-room is used for the stowage of the season's provisions, cordage, spare oars, etc. Here the keeper and crew live during the active season, which varies according to the latitude of the districts into which the coast is divided.

The keeper commands the crew of six surfmen. His position is one of grave responsibility, demanding long experience in his vocation and rare judgment in the execution of his important trusts. The selection of his men, upon whose fidelity and skill depend not only his success, but oftentimes his life, as well as the fate of those whom he is expected to succor, is very properly confided solely to him.

Both keeper and men are chosen from among the fishermen in the vicinity of the stations, who are most distinguished for their ability as surfmen. Drawing their first breath within sound of the surf, they pass through child-hood viewing the sea in all its moods. In early youth they make their first essay in the breakers, and from that on to manhood advance from the least important oarthrough regular graduations, until the most skillful reach the command of the boat. This life gives them familiarity with the portion of the beach upon which they dwell, and



DRILL AND EXERCISE IN THE SURF-BOAT.

its bordering currents, eddies, and bars, and an intimate acquaintance with habits of the surf. It is an erroneous notion that the experience of the sailor qualifies him for a surf-boatman. The sailor's home is at sea. He gives the land a wide berth, and is never at ease except with a good offing. He is rarely called upon to ply an oar in a small boat, particularly in a high surf, and his vocation gives him little knowledge of the surfman's realm, which is the beach and a portion of the sea extending but little beyond.

depressions between the hillocks, separating them into islets. In the memorable tempest of October 22 and 23, 1878, the patrolmen suffered severely, and several were in extreme peril. In one instance, a patrolman not returning in the morning, and his fellows not being able to discover him with their glasses from the look-out of the station, a boat expedition was sent in search of him among the still flooded sand-hills, upon one of which, nearly covered with water, he was at length found, barely alive.

When a vessel is driven ashore in a storm, the patrol-



LAUNCHING THE SURF-BOAT.

man, being the first to discover her, takes the initiative steps in the operations for the rescue. He carries at night, besides his lantern, a signal, which ignited by percussion emits a red flame. He is quick to observe the slightest indication of a disaster; the glimmer of a light, the white apparition of a sail, the faint outline of a slender spar just beyond the breakers, or at his feet on the strand perhaps a grating, a bucket, or some other article which he knows



THE NIGHT PATROL.

to have come from the ship. Then with all his faculties bent to the search, he descries a vessel either too close in for safety or actually stranded in the breakers. In either case he burns his signal, whose crimson light flashes far out to sea, and warns the unwary ship to stand off, or assures the shipwrecked that aid is near at hand. Being certain it is a wreck, he hurries to his station, perhaps a mile or two away. His hasty entrance is sufficient to arouse the slumbering inmates. Struggling for breath he makes his report, the nature of which determines to the keeper the means to be employed for the rescue. surf-boat is to be taken, at the word of command the wide doors of the boat-room are thrown open and the boat-carriage drawn by willing hands rolls out bearing the graceful craft fully equipped for service. In the absence of horses, the burden must be hauled by the men, and their laborious task may be conceived, when it is stated that each man must drag nearly one hundred and eighty pounds through soft, yielding sand, whatever the distance may be between the station and the wreck, while one hundred and fifty pounds is the estimated load for a man to draw over a level turnpike.

Arrived at the scene of the disaster, the boat is launched with as little delay as possible from a point opposite the wreck, in order to get the benefit of the slight breakwater which the position of the vessel affords, and is soon off and away on its errand of mercy. The height of human skill is required of the keeper, standing at the steering oar, to guide the boat safely in its passage through the wild running breakers. The surfmen, with their backs to the dangers lurking in the treacherous seas, do not go blindly to uncertain fate, for they rest their eyes continuously upon the keeper, while they ply their oars in obedience to his commands, and mark his slighest gesture. Their first attempt is not always successful. Despite every care, a suddenly leaping sea may break, and fill the boat, compelling a return to the shore, or capsize her, tumbling the men into the water, where they are tossed about in the surf, but are sustained by their cork life-belts until, making a foothold, they struggle to the beach, and righting the boat try again and perhaps a third or fourth time, before finally

reaching the wreck. Here the most careful manœuvring is necessary to prevent collision of their light craft against the huge hull of the stranded vessel, or to avoid fatal injury from falling spars and floating wreckage. Taking off as best they can the anxious people, whom the overwhelming seas have driven into the rigging of the vessel, perhaps fast going to pieces, the difficult return to the shore remains before them. The keeper must now decide upon one of the several methods of landing, as the nature of the sea may demand. Under favorable conditions he may run in immediately behind a roller, and by quick work keep well ahead of the following one, and so reach the beach in safety. With a different sea he may back in, occasionally pulling ahead to meet an incoming breaker; and again, for a worse sea he may use a drag to check the headway with which a swift rolling comber would otherwise carry the boat high upon its summit until a portion of the keel would be out of water, the bow high in the air and the stern still resting upon the crest, - from which position, on account of the slight hold the boat has in the water, the sea behind is liable, in spite of the efforts of the steersman, to turn it to the right or left, causing it to "broach to" and capsize, or if this be avoided, perhaps to be "pitchpoled," end over end.

When the patrolman has reported at the station that the boat cannot be used, the mortar-cart is ordered out. Like the boat-carriage it must be drawn by the men, and though the load is somewhat lighter, the state of the sea or the weather increases the labor; the one compelling them to take a route close to the low sand-hills in the wash and foam of the spent breakers, or back of the hills in the looser sand by a circuitous course, and the other harassing and retarding them with its fury. Reaching at length their destination, each man, well trained in his duties, proceeds to handle and place in position the portion of the apparatus assigned to his special charge. Simultaneously

the different members of the crew load the gun, place the shot-line box in position, dispose the hauling lines and hawser for running, attach the breeches-buoy, put the tackles in place ready for hauling, and with pick and spade begin the digging of a trench for the sand-anchor, while the beach lantern lights up the scene.

And now the gun is fired! The shot with its line goes



BURNING A SIGNAL.

flying against the gale, over the wreck into the sea beyond; the line falls across a friendly spar or rope, and is soon seized by the eager benumbed hands of the imperiled sailors, whose glad shouts, faintly heard make on shore. known to the lifesavers their success. The surfmen connect the whip (an endless line), the tail-block and tally-board to the shot-line already being hauled in by the impatient sailors. The whip passes rapidly toward the wreck, and arriving

there the sailors make fast the tail-block in accordance with the directions on the tally-board and show a signal to the shore. Hauling upon one part of the whip, the surfmen then send on board, attached to the other part, the hawser and a second tally-board, which directs how and where the end of the hawser should be

secured to the wreck. The tackles now connecting the sand-anchor and the shore end of the hawser are hauled upon until the hawser is straight and taut, when it is lifted several feet in the air, and further tightened by the erection of a wooden crotch, which constitutes a temporary pier while the wreck answers for another, and the hawser stretched between the two suggests a suspension bridge in an early stage of construction with but one cable in place. The breeches-buoy is drawn to and fro upon the hawser, and by means of it the shipwrecked are brought safely to shore.

This method is expeditious when once well in operation, but is frequently attended with difficulties which evoke every resource and expedient. Often in storms a strong swift current runs along the coast between the outer bar and the shore, called by the surfmen the "set" or "cut," which, in connection with the action of the surf, twists and entangles the lines, as the attempt is made to haul them across from shore to ship, or sweeps them away to a great distance, causing heavy strains that sometimes prove too much for their strength. Occasionally, when the apparatus is well set up for use, the motion of the wreck, as it is lifted and rolled about by the powerful seas, is so violent and constant that, even with the most watchful care, the strong lines snap and break asunder like packthread; and at times the careless or bungling manner in which those on board perform their part, allowing the shot-line or whip to saw across the stiff rigging of the vessel, or chafe against other portions of the wreck until it parts, hinders the work or altogether prevents success. Now and then, in extreme cold weather, the lines become rigid and clogged with ice as soon as they are exposed to the air when lifted out of the water; and again, unless proper care has been observed in the arrangement of the blocks and lines, the velocity with which the freighted ropes run through the blocks, may set on fire the wooden

HAULING THE MORTAR CAR.

shells or cases that contain the sheaves or pulley-wheels. These mishaps and reverses tax the patience and resources of the surfmen to the utmost, and often put their courage to the severest test. The breaking of the lines involves the toil and delay of the duplication of their work, and perhaps the anxious suspense necessitated by a return to the station for spare lines. Sometimes it is found necessary to abandon altogether the use of the hawser, and to draw the people ashore through the water with the whip and breeches-buoy, or even without the latter, the shipwrecked persons securing themselves into the whip by tving it around their bodies. In some of these contingencies people have been held suspended in the breakers or ensnarled in the floating cordage and debris of the vessel, and only extricated from their perilous positions by the most daring exploits of the surfmen, who have worked themselves out through the surf, and, at the most imminent risk of their own lives, released the helpless beings from their bonds, or disentangled them by severing the meshes with their knives, and returned, bearing their gasping trophies safely to the shore.

Other accidents and obstacles are likely to embarass the efforts of the life-saving crews, who usually arrive at the scene of disaster exhausted by their wearisome march.

The breeches-buoy, although it is an exceedingly useful contrivance for bringing men ashore, is hardly a suitable one for transporting women and children, or for rescuing a large number of persons with dispatch, or invalids whom it is necessary to protect from wet and exposure. In such cases the life-car is usually brought into requisition and used with the arrangement of ropes already described; or, as externally it is simply a covered boat, under favorable circumstances it may be drawn back and forth through the water by a line attached to each end. More frequently, however, it is connected with the hawser by a simple device, in such a manner as to permit it to float upon the

water, while preventing it from drifting, in strong currents, too far from a direct course for the length of the hauling lines. The life-car is about two hundred pounds heavier than the breeches-buoy, and accordingly increases to that extent the burden of apparatus to be brought to the scene of a wreck; but it has sufficient capacity for five or six adults, and has carried, at a single trip, nine half-grown children. Practically water-tight, but provided with means for supplying air, its passengers are landed high and dry and without serious discomfort. The occasions of its use have been numerous, and in one notable instance—the wreck of the Ayreshire below Squan Beach, on the coast of New Jersey - two hundred and one persons were rescued by it, when no other means could have availed. Silks, fine fabrics, jewelry, and other valuable goods have often been saved by its use, and from one vessel the car took ashore a large sum in gold bullion, belonging to the United States, together with the mails.

The general features of the Lake and Pacific coast admit of the use of the self-righting and self-bailing life-boat. On the Lakes the stations are situated, with few exceptions, at, or very near, commercial towns, or cities having artificial harbors. These harbors are formed at the mouths of rivers by long piers projecting some distance into the lake. The passages between the piers are quite narrow and difficult to enter when high seas are running at right angles to them; thus vessels in attempting to go in are frequently thrown out of their course at the critical moment, and are cast upon the end of the pier to quick destruction, or, escaping that danger, are driven ashore outside. Here the self-righting and self-bailing life-boat is used with good effect. This marvellous product of inventive thought, which has been developed by a century of study and experiment, from the first model, designed by the English coach-maker, Lionel Lukin, in 1780, is the best life-boat yet devised. It has great stability, and is with difficulty upset, but when this happens, it instantly rights itself, and when full of water empties itself in from fifteen to twenty seconds. The attainment of the first of these wonderful qualities is secured by means of a heavy iron keel, weighing from six hundred to fifteen hundred pounds, according to the size of the boat, and two large air-chambers placed in the bow and stern—the keel, when

the boat is capsized, being drawn by the force of gravitation back toward and into the water, while the submerged air-chambers seek the surface at the same moment. property of self-bailing is produced by the insertion of a deck or floor, some inches above the loadline, in which there are placed several tubes extending down through the bottom of the boat, fitted with valves at the top, which open downward by the pressure of any water in the boat, and are selfclosing when the pressure ceases. The draught



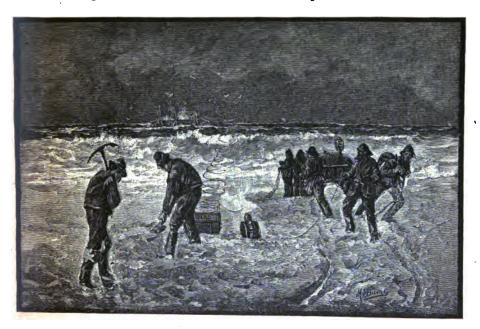
SURFMAN WITH LIFE-BELT.

and great weight which the construction of such a boat involves—the smallest weighs scarcely less than four thousand pounds—generally precludes its use, as has been stated, along the sandy flat beaches of the Atlantic. The Lake stations being inside the harbors and fronting directly upon, or over comparatively smooth and sufficiently deep water, the heavy boats launched directly from their ways, are propelled by eight oars, or towed by a tug-boat out

between the piers to the rescue. Not unfrequently, just before navigation is suspended by winter on the Lakes, a single life-saving crew is employed upon several vessels at a time. Recently four wrecks occupied half a station crew in the vicinity of their station on the same day, while the remainder were at work on a fifth, forty miles away, whither they had been transported by rail, on a special train secured for the occasion. It is a common occurrence for the life-boats to go under sail and oars ten or twelve miles from their stations to the assistance of vessels in distress. On the Pacific coast, where the prevailing gales blow along and not upon the shore, and where there are few outlying dangers, and these at long intervals apart, coast disasters are comparatively rare, and it has been deemed necessary to provide for the establishment of but eight stations. With one exception, these are at points where the self-righting and self-bailing life-boat is available.

But the work of the crews does not always end with the rescue. The pressing necessities of the moment administered to, the sufferers are led, supported, or carried, as their condition will admit, to the station, which is quickly transformed into a hospital. The neglected fire is replenished with fuel; the kitchen stove soon glows with heat; the plethoric clothes-bags and well-filled chests of the surfmen are opened, and dry clothing is put upon all that need it; snow and cold water, and afterward scrapings of raw potatoes from the mess stores, are applied to the frost-bitten; the prostrated are put to bed in the extra cots provided in the upper rooms, and tenderly tucked in by rough hands, suddenly grown gentle; the medicine chest, filled with simple remedies and restoratives, is opened, and stimulants dispensed to the exhausted, while plasters, lint, and bandages are applied to those who have been bruised and wounded by the wreckage. Meanwhile, shipwrecked and surfmen are inhaling the delicious aroma of boiling coffee, which the mess-cook deems it his first duty to prepare. This having been partaken of, the keeper designates the least weary of the crew to attend to the wants of the strangers, while the others retire for rest until required to relieve the watch.

Occasionally, in the exigencies of ship-wreck, persons reach the shore senseless and seemingly without life. That the surfmen may be able to act intelligently in such cases, the regulations of the service contain plain directions for

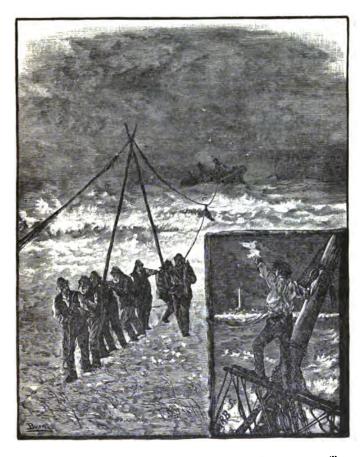


FIRING THE MORTAR.

the application of a simple method for restoring the apparently drowned, in which the men are regularly practiced, according to the instructions of a medical officer of the Marine Hospital Service, who visits the stations once a year as a member of the board for the examination of the keepers and crews, as to their physical and professional qualifications. The principal features of the method are indicated by the cuts on page 374, one showing the first

step taken, by which the chest is emptied of air, and the ejection of any fluids that may have been swallowed is assisted; and the other the position and action of the operator, in alternately producing artificial expiration and inspiration, in imitation of natural breathing, which may be expected to ensue if the patient is not really dead.

There are many appliances auxiliary to the principal means employed in the operations of the service, of which space will not permit present notice. The life-saving dress, however, which has been made familiar to the public through the exploits and expeditions of Paul Boyton, is one of considerable importance, and on several occasions has been used with great advantage. At the stranding of a schooner in the night on Lake Ontario last year, in a sea which would not admit of the use of the boat, a shotline was fired over her, with the intention of setting up the lines for the use of the breeches-buoy. The sailors hauled the whip-line on board, and when the tally-board, on which the directions for the method of procedure are printed in English on one side and French on the other, was received, the captain attempted by the light of the lantern to read them. Puzzling over them for some time, he at length contemptuously threw the board down on the deck, finding it impossible to make anything of it, having seen only the French side. Not knowing what else to do, therefore, he simply made the line fast, but in such a manner that it could not be worked from the shore. The surfmen vainly endeavored to convey instructions by signs. In the meantime, the destruction of the vessel and the loss of all on board seemed imminent. In this dilemma, one of the surfmen put on the life-saving dress, and, after a gallant struggle, succeeded in hauling himself along the line through the breakers to the vessel, where he remained and took charge of the operations on board until all were safely landed. On another occasion three sailors, in spite of the warning signals of the life-saving crew, committed the com-



mon error of attempting to land in one of the ship's boats. A strong current was running between the ship and the beach, and the water was full of porridge-ice for a long distance from the shore. Knowing what would happen, two of the surfmen put on their life-saving dresses and ran up the beach, with difficulty maintaining their race with the boat, which continued for the distance of two miles, until reaching an open space in the ice, the sailors attempted to land, when they were capsized in the surf,



THE BREECHES BUOY.

but were rescued from drowning by the surfmen, who rushed into the breakers and safely dragged them ashore. Clad in the life-saving dress, the wearer presents a strange appearance, and to an uninitiated observer he might seem, while engaged in his weekly practice, to amphibious be some monster, disporting one moment in the water and the next on land. Sometimes in cold weather, a surfman thus arrayed, goes on some errand from the station to the mainland, his route being an air-line across deep sloughs or creeks and wet marshes for two or three miles. A surfman once going from an outlying beach in his life-saving dress, had just crossed wide slough, and ris-

ing suddenly among the reeds on its muddy banks, beheld two snipe shooters a hundred yards away, gazing in undisguised astonishment. "I seen they was mighty skeered," said he, "and took me for the devil or some other sea varmint, so I beginned to cut up and prance round like a yearlin' calf in a two-acre medder, a-yellin'

and a-screechin' all the time as loud as I could holler, and ye'd jest orter seen them fellers scoot fur the cedars. I guess they's runnin' yit." To a doubting Thomas who asked, "But whar was their guns all this time?" he replied: "Pshaw! them fellers never knowed they had no guns." The hunters' version of the adventure has never reached the beach, but it may be easily imagined.

When the life-saving dresses were first introduced into the service, the surfmen regarded them with as little favor as they usually manifest for any innovation upon the simple devices and methods which were transmitted to them from their fathers, especially as regards appliances for their own safety, such as life-belts and cork jackets. They prefer to rely upon their skill and endurance as swimmers, with unencumbered limbs and bodies. Probably, also, a certain degree of pride disinclines them to wear anything that might suggest the least suspicion of a faint heart. For a long time, to insure their use in the face of these prejudices, firm and judicious measures on the part of the officers of the service were required, and the life-belts were not willingly donned by the men throughout the service until they had been taught a sad lesson, by the capsizing of a surf-boat and the loss of the crew, who had gone to a wreck at night without them. Only recently, a brave volunteer, on taking an oar in a station boat, in a dangerous sea on Cape Cod, was proffered a spare life-belt but declined it saying: "Oh, no! I don't want to go floating by Highland Light carrying a deck load of cork." The life-belt is manufactured from selected cork, and is so adjusted that the wearer has free use of his limbs in any position. Its buoyancy is sufficient to support two men in the water. Since its adoption by the men, none have been drowned, although many have been thrown into the water by capsized boats.

The life-saving men, of course, must have their hours of relaxation. Among the people of the coast, more than

elsewhere, perhaps, a pronounced religious sentiment prevails; hence, carousing and gaming and other immoralities are rarely indulged in. Especially is this true at the stations, where prohibitory regulations add their restraint. Each station is provided with a substantial library, of wellselected books, the donations of generous people, with the view of contributing to the diversion of the crews and the solace of the victims of shipwreck who may be temporarily



THE SELF-RIGHTING LIFE-BOAT.

detained there. These libraries are the source of much entertainment and instruction to the men. In fine, clear weather, when the wind is off shore, and there is little occasion for anxiety, the surfmen gather in the mess-room and while away the time rehearing the legends of the coast, spinning yarns, singing or listening to the tuneful strains of violin or flute. Now and then when the moon is full, there is a "surprise party" at the station. From

the mainland or the neighboring settlements come men and women, the friends and relatives of the surfmen, bringing cakes and pastries, and other good things from their homes. Then all is joy unconfined; the boat-room is cleared of carriage and cart, and the merry dance goes round. Do not imagine, however, that in these festivities the patrol is relaxed. Not at all, the rule is inflexible, and its violation would be discovered. Indeed, who knows that the beach watch is not then doubled and that, with wife or sweetheart to share his vigils, the patrolman yearns not for the pleasures at the station?

A mute but interested spectator of the entertainment is perhaps a Newfoundland dog. These noble animals, whose good qualities are so well known, are kept at many of the stations and they often seem instinctively to understand the object of the service, to which they soon become faithfully attached. The celebrated picture of Landseer, entitled "A Distinguished Member of the Humane Society," will readily be recalled by the reader. One remarkable illustration which the service furnishes of the characteristics of this sagacious animal is worthy of note. At the sad disaster to the steamship Metropolis on the coast of North Carolina, while the life-saving men were engaged in rescuing the crowd of passengers thrown into the sea by the breaking up of the vessel, a large Newfoundland dog belonging to a gentleman residing in the vicinity, seemed suddenly to comprehend the situation, and joining the throng of rescuers, plunged into the surf, seized a drowning man, and dragged him safely ashore. Shortly afterward he left his master and went to the station of the crew with whom he rendered this first service in life-saving, and there he still remains, steadily resisting every inducement to return to his former master. Every alternate night he sets out with one of the first patrol and accompanies him until the patrolman from the next station below is met, when he joins the latter and proceeds with him to that station, where he remains until the first watch of the next night, when he returns to his own station in the same manner. These self-assumed duties he performs with the peculiar gravity of demeanor that distinguishes his species, changing his station daily, for some good and sufficient dog-reason, no doubt, while very sensibly keeping but one watch each night.

The plan of the organization of the service is simple but effective. The coast-line is divided into twelve districts,



THE SELF-RIGHTING LIFE-BOAT UNDER SAIL.

there being eight on the Atlantic coast, three on the Lakes, and one on the Pacific. In each of these the stations are distinguished by numbers, from one upward, beginning at the most northerly or easterly. Each district is under the immediate charge of a superintendent, who must be a resident thereof, and familiar with the character and peculiarities of its coast-line. He nominates the keepers of the stations, makes requisition for needed supplies, etc., and pays the crews their wages. To each district is also

assigned an inspector, who is the commanding officer of the revenue cutter whose cruising grounds embrace the limits of the district. These officers, under the direction of a chief inspector, who is also an officer of the Revenue Marine, make stated inspections and drill the crews. The entire service is under the charge and management of a general superintendent, whose office is a bureau of the Treasury Department. All the officers of the service are invested with the powers of customs officers, which enable them to protect the interests of the government in preventing smuggling, and assisting in securing the collection of duties upon dutiable wrecked goods. They are also required to guard wrecked property until the owners or their agents appear.

The officers and men of the service are chosen without reference to any other consideration than those of professional fitness and integrity. In the introduction and maintenance of this principle of selection much opposition and difficulty have been encountered. In the older districts, owing to the fact that until 1871 the keepers of stations were regarded only as custodians of public property, without responsibility in the success or failure of efforts at wrecks, surfmanship was not a standard of qualification, and these positions were generally made the rewards of political service by each of the parties, as they alternately succeeded to power; and so, when the employment of crews was authorized, the local politicians endeavored to control the appointment of these also. Their success soon became only too evident, and it was to counteract these injurious influences that the board of examination already mentioned was constituted. A thorough inspection of the service was made; every station was visited, the incompetent were dismissed, and qualified men were employed in their places. The advantageous changes in the corps somewhat altered its political complexion, and the nullification of the effort to subordinate the service to political ends was

not quietly accepted. Threats and appeals were in turn resorted to, to overcome the determination of those in charge of the service. Upon the establishment of new districts, similar attempts to gain control of them are generally made, but they are not so tenaciously persisted in.

These attempts are not confined to the party in power. No sooner is a keeper appointed from the opposition than he is beset with solicitations and demands to remember his party friends. The official injunction, however, issued



LIFE-SAVING DRESS.



yearly, at the commencement of the season, to the superintendents and keepers, that only capability and worth are to be regarded in the choice of their subordinates, supplemented by the action of the examining board, keeps the service well exempt from political domination.

But, it will be asked, what results have been attained by the service? At this writing, (1880), the last published report is that of the fiscal year ending June 30th, 1878. From this it appears that during that year there were 171 disasters to vessels within the limits of the operations of the service. There were on board these vessels 1,557 persons. The number of lives saved was 1,331, the number lost 226, and the number of days' succor afforded to shipwrecked persons at the stations was 849. Of the 226 lost, 183 perished in the disasters to the steamers Huron and Metropolis, the former occurring four days prior to the manning of the stations, which the appropriations for the maintenance of the service did not then permit to take place until the first of December, and the latter occurring at a distance so remote from the nearest station as to render prompt aid impossible; -- defects which the reports of the service had repeatedly pointed out, and asked to have remedied. The loss of fourteen others occurred where the stations were not open. Making allowance for these, the loss of life legitimately within the scope of life-saving operations, was twenty-nine. The sad catastrophes of the Huron and Metropolis contributed largely in securing the passage of the effective bill of June, 1878, which was introduced and warmly advocated by Hon. S. S. Cox, and which established the service on a stable basis, with powers and functions somewhat commensurate with its purposes and capabilities. From November, 1871, the date of the inauguration of the present system, to the 30th of June, 1878, the number of disasters stated to have occurred within the field of operations of the service was 578; the number of persons on board the vessels involved was 6,287; the number saved was 5,981; the number lost 306, and the number of days' relief afforded to shipwrecked persons at the stations, 3,716.

It should be observed that during the first of these seven years the service was limited to the coasts of Long Island



RESUSCITATION: EJECTING WATER FROM BODY.

and New Jersey; the two following years, to those coasts, with the addition of Cape Cod; the next year to the foregoing, with the addition of the coasts of New England and the coast from Cape Henry to Cape Hatteras; the next,



RESUSCITATION: RESTORING RESPIRATION.

to the foregoing, with the addition of the coast from Cape Henlopen to Cape Charles; the next, to all the foregoing, with the addition of Florida and the lake coasts; and the last year, to the coast at present included.

It is not claimed that the entire number of persons des-

ignated in the above figures as saved would have perished but for the aid of the life-saving crews, since not unfrequently, in cases of shipwreck by stranding, a portion of the imperiled succeed in escaping to the shore, as did several in the instance of the *Huron*; and it often happens that the sudden subsidence of the sea spares the threatened vessels from destruction. But it is certain that a large proportion of the number would have perished. A closer approximation to the real efficacy of the service could be reached, if statistics of the loss of life in former years upon the coasts where life-saving stations are now established could be obtained. Unfortunately no such record

exists, except an imperfect one, consisting of meagre data relative to disasters between 1850 and 1870 in the vicinity of the rude station-huts of the Long Island and New Jersey coasts. It is known that this record by no means includes near all the disasters which occurred on

MEDICINE CHEST,
LANTERNS, ETC.

these coasts. A comparison, however, of the record of the service since 1871

with this list shows an average annual reduction in the loss of life of about eighty-seven per cent!

The record is a shining one. How much of it is due to official organization may readily be conceived, but it is less easy to realize how much of it belongs to the gallant crews of the stations, some of whose hardships, together with the methods they employ, the foregoing pages disclose. The professional skill of these men, their unfaltering energy and endurance, their steady bravery in the hour of supreme ordeal, and at all times their sober fidelity to duty,

however hard or irksome, are beyond all tribute. None can better know it than the officers in charge of the service, whose main reliance must be, after all, upon the manly virtue of these crews. What, indeed, can ever stand in lieu of men!

Many things are yet needed in aid of the labors of the crews. Numerous articles of outfit and equipment are required, which the appropriations, so far, have not been sufficient to provide; an imperative need is an additional man for each station; at present, when a wreck occurs, the station is left without a proper custodian, who would thus be provided to guard the public property and to keep the house in the state of comfortable preparation befitting the return from a rescue of the exhausted crew, with a convoy of drenched, frozen, wounded, and famished people. In the routine of station duty, another man would also greatly relieve the others, now too severely tasked. Another urgent requirement at many of the stations is horses, which Congress should provide. The heavy draught labors involved in hauling a ponderous load of apparatus for miles to a wreck would thus be spared the men, giving them time and strength for their daring and perilous work of rescue. Another need, surely, is pensions for those who are permanently disabled in the line of their duty, and for the widows and orphans of those who perish in the endeavor to save life from shipwreck. The guns trained to destroy life in the service of the country carry this grateful condition. The guns trained to save life, no less in the service of the country, have an equal right to carry it also. What soldiers have a better claim to this form of public remembrance than the noble beachmen who surrender life, as did those in North Carolina, in 1876, when endeavoring to rescue the sailors of the Nuova Ottavia?

In the thought of this deed let us close. A gallant soul whose name honors the roll of the Life-Saving Service, once said: "When I see a man clinging to a wreck, I see

nothing else in the world, and I never think of family and friends, until I have saved him." It is certain that this is the spirit which pervades the men of the coast. All report, all record testifies to it, and every winter their deeds sublimely respond to the divine declaration: "Greater love hath no man than this, that a man lay down his life for his friends."



THE MESS-ROOM, "WHEN THE WIND IS OFF SHORE."

.. CORRESPONDENCE.

The correspondence following, having occurred since the publication of the "Winter Talks," I have deemed it advisable to append it to the work without disturbing the previous arrangement. The letters that I have received from the several station keepers fully illustrate the benefit of their mission, and give the reader an insight into the quality of those composing the service. They are men of pluck, daring and intelligence, and bring to their work excellent seamanship and sound judgment, as well as humanity, to make it effective. Those who have little to report are as efficient and ready for service as those who by chance are called to report more—their turn likely to occur at any moment.

Capt. A. L. Remick, keeper of Rye Beach Station, thus writes:

The schooner Rockaway, a small vessel of about 40 tons, left York, Me., about noon, Dec. 23, with a cargo of bricks, bound for Boston. Wind N. W., light; thermometer 400 below, and a thick vapor. Everything went well until about midnight, but when near Thatcher's Island the wind suddenly shifted to S. E., with a heavy sea on, and finding he would not weather Cape Ann, the captain bore away for Portsmouth. During the night the wind blew away some of his sails and the sea sent his boat adrift, the vessel leaking badly. When about four miles from Portsmouth, took the wind from N. N. E., and in the crippled condition the vessel was it became necessary to anchor her three-quarters of a mile from shore, and two and a half miles from this station. As it was misty and thick we could not see the vessel from the station, but a man who lived on the beach, near by, saw her at anchor, with signal of distress flying, and, coming to this station, notified us of the fact. We at once run the surf boat down the beach. There was a tremendous sea running, but we launched the boat, and in attempting to get over the inner bar a heavy sea partly filled the boat, breaking the twenty-two foot steering oar, and knocking the keeper (G. B. Caswell) down into the bottom of the boat, compelling him to return to the shore. Holding a council, we decided that it would be quicker and surer to get a team and haul the boat to Rye Harbor, one mile to the eastward of the

station, and launch from there, as it was getting late in the afternoon. We launched the boat in Rye Harbor, with comparatively smooth water, but soon encountered the heavy sea again after passing a point of land, but after a hard pull of one hour and a half, against a head wind and heavy sea, we arrived at the wreck, from which we took Capt. Kingsbury, his wife and fifteen year old son, who constituted the crew, returning with them safely to Rye Harbor, from which the Captain's wife was conveyed to the station in a team, the others remaining by the boat. We did not reach the station till after dark, where the three were provided for for two days. Next morning, the sea having subsided somewhat, the vessel was still above water, and we again launched our boat and went to her. She had two and a half feet of water in her hold, but as she had a powerful pump we soon freed her, and then started for Portsmouth, in a surf-boat, to procure a tug to take her in. This we succeeded in doing, and, after again pumping her out, she was towed safely into Portsmouth, thus saving vessel, cargo and crew."

Capt. J. H. Haley, Keeper Hunnewell Point, Maine, Station, sends me the following, which covers a period of great activity, and affords convincing argument of the great benefit of the system:

"This station was ready for duty Jan. 14, 1884, and since that time we have rendered assistance to fourteen vessels, besides three that were warned off the coast by the burning of the Coston night-signal. We have rendered assistance to light-keepers in several ways, in one instance suppressing fire, and three small boats have been aided. The fourteen vessels imperiled were valued at \$148,000, their cargoes at \$10,675. The following were the vessels aided, and the nature of the assistance rendered:

Jan. 19, 1884, the three masted schooner *Electric Light*, from Philadelphia for Bath, Me., with a cargo of coal, anchored between Seguin and Pond Island light, and a gale from N. N. E. having arisen, in attempting to get under weigh, her anchor broke ground, with a long scope, exposing her to peril. We launched the surf-boat and went to her assistance, heaving up anchor and furling sails, leaving her to be towed to Bath by the Eastport cutter, that had come to her assistance but could not render any owing to the violence of the gale.

March 1, 1884, the Br. schooner Astra, of St. Johns, N. B., bound to that port from Lynn, Mass., light, made the breakers in a thick snow storm, the vessel just clearing the rocks, when the anchor was dropped. When the snow lifted we saw the vessel and went out to her. Found the crew all packed up and ready to leave when the worst should happen. Went on board, cleared the deck of snow, furled up the sails, and made things as comfortable as could be under the circumstances. The vessel lay all right, and when the wind subsided she went on her way. My men got somewhat rost-bitten, as it was very cold.

April 22, 1884, the schooner Cocheco, of Deer Island, Maine, for Rockland, with a cargo of cord-wood from Cape Small Point, Phipsburg, signaled for assistance. Her sails had blown away and she was leaking badly. Mended the sails, and went with the schooner to Boothbay, where we left her with thanks of her crew.

The next one aided was the schooner Agnes R. Bacon, of Brighton, N. J., bound to Philadelphia, Pa., from the Kennebec with a cargo of ice. She broke adrift in the night and struck some sunken rocks called the Black Jacks. We went on board, and, knowing she would fill as soon as the tide flowed, went to work at once to take everything in the cabin to the shore. When the tide flowed, got the vessel off the rocks, and a steam tug towed her to Portland, Me., for repairs.

The schooner Katie Mitchell, of Bath, loaded with cord-wood for Boston, while beating out of the river miss-stayed and went ashore on the Lower Sugar Loaf. The steamer Knickerbocker, after considerable trying, failed to release her. It being in the inactive season, it was some time before I could pick up my men, as they were all fishing. I found three, who, with myself, went on board the vessel, which was pounding the bottom hard. We went to work, and in one hour had her afloat. Tried the pumps and found her tight, when the captain proceeded on his way, well pleased with what we had done.

Sept. 10, 1884, the *Charles E. Balch*, a four master schooner, of Bath, light, on her way up the Kennebec for ice, anchored off the beach just above this station. There came a heavy squall from the east, which drove her ashore. We launched our boat and run hawsers from the vessel to a steamboat, by which she was towed to a safe anchorage. While launching the boat one of my men got badly hurt, from which he has not yet recovered.

The Sloop Gull, while trying to get out of the river, ran on the rocks, keeled off, and would have filled if we had not kept constantly bailing with buckets. She was a little vessel, worth only about \$600, but she was all her captain owned in the world, and of more consequence to him than would have been a full-rigged ship to others. We meet, in the discharge of our duties, some very peculiar people. Some appear to appreciate the service rendered, while others watch us with most crafty suspicion.

Oct. 19, 1884, the schooner *James Barrett*, of Gardiner, while beating into the river, missed in stays, and went on the rocks at Parker's Point. We went on board, ran out a kedge anchor, and warped the vessel to safe anchorage.

Oct. 21, 1884, a brig ran on the bar in the night. We went on board, got out anchors, and soon had her in a safe position.

Nov. 6, 1884, three-masted schooner F. F. Merrows, of Boston, anchored off this station at twelve, midnight, the wind blowing a gale from the west. She struck adrift and went down on the Jacks. The captain burnt his torch for help, to which the watch replied with his Coston night-signal. We launched our boat and went to him. The vessel lay in a hard place, and it was seen that she must be kept from the Lower Shug, or Cape, if possible. We ran out a kedge and got lines to the rocks to hold her from going on

the Shug. This was done with great difficulty, as the sea deluged my men and and myself, and the night was very cold. The wind held more to the north, and the sea went down with the ebb tide, when we parted our kedge anchor hawser and the lines attached to the rocks. The only thing to be done was to make sail and keep the vessel if possible from a breaking ledge under her port quarter. We succeeded in keeping her in this position until the tide commenced to flow, when she was towed to Bath. The captain was happy at his escape, and gave us a letter of thanks for our timely services.

Nov. 22, boarded the schooner Isabella, of Wiscasset, which we found in a bad condition, with jib-boom gone, and main topmast and spring stay. Letting the mast hang over the stern we went into the cabin where we found one man sick and another trying to get some breakfast. We asked the captain how he carried away his spars. He said the vessel "rolled them away in the night," which did not seem probable. We asked if he wanted assistance. He said he did, as his best man was sick and not able to do anything. Went to work, clearing away the broken spars, and, getting up a temporary sparing stay, we hove up anchor and got the vessel into the river out of all danger. In about three weeks the schooner came out again, loaded with slab-wood for Boston, but when off Cape Elizabeth was abandoned and drifted on Beach Island, Fletcher's Neck, bottom up.

Dec. 12, 1884, the schooner Alice Oakes, of Portland, Me., from Bath for New York, with a cargo of lumber, while trying to get out of the river, found herself in a dangerous position near the Jacks, and lost one of her anchors; went on board and helped her out of her trouble, when she went on her way.

The sloop Alice, of Bath, Me., for Portland, with a load of furniture, when off Seguin was dismasted. We saw the accident and went to her assistance. We got the broken mast on board and as much of the sail as we could by raising up the gaff, when the surf-boat, with her sail set, towed the sloop with a fair wind, to Harmond's Harbor, the nearest place that could be reached, where we cut the mast over and stepped it again, set up the rigging, and left the sloop in a better condition for carrying sail than before.

The last one to call for our services was the schooner Orina B. Kimball, that left Portland on the 18th of Jan., '85, for Boothbay with a general cargo. When off Halfway Rock she jibed her foresail, which took the foremast off about half way up. The wind continued to blow until it had increased to a gale. The vessel was kept before the wind, with a little bit of the mainsail, the only sail that could be made on her, and when off the Black Rocks, the captain, thinking the vessel was going ashore, let go both anchors, and fetched the schooner up just clear of the breakers. The crew then left her to her fate, and landed at Fire Island Harbor, more or less frost-bitten. They got a man to come to this station for assistance, who arrived at 4 o'clock in the morning. We launched the boat and immediately went in search of the schooner. We found her as she had been left, with chances looking hard for our having the vessel and cargo. The sails were all torn to pieces, and broken spars lay all around the decks, with a coating of ice about three inches thick over everything. We went to work

with a will, beat off the ice, cleared away the rigging, spars and sails, run the fore gaff up the mast, (jaws up) with tackle attached, hoisted throat of foresail, lifting the peak by a block in the lee main rigging, making all as taut as we could. Then the anchors were got in and the vessel headed for Boothbay. We got a little more of the mainsail on her, and arrived all right. When the captain and crew came on board the first thing they did was to go down in the cabin and see that nothing had been stolen—a pot of beans that had been baking in the oven being the only thing missing. The captain was grateful enough to say that he felt "much obliged" to us for saving his vessel and cargo, valued at \$5,000. I asked him for a letter expressing his thanks for our services, which he said he would write, but it has not been received yet.

On board of these fourteen vessels there were seventy-nine persons, with two women passengers, all of whom were saved.

The following is by a correspondent of The Bath, Me., Independent:

A STRUGGLE WITH THE WAVES. .

I was summoned Tuesday, Jan. 25th, to go to Seguin to see Mr. Abbott, the second light keeper, at about one o'clock P. M., by Capt. Parker Haley and a Mr. Barton, a keeper on Seguin. The wind was breezing up southwest quite fresh at the time. I went with them from the lower part of Georgetown in a dory across to Fort Popham. We left the wharf there at about half past two o'clock in the life-boat with Capt. John Haley and five of his crew, Warren Davis, Ephraim Marr, Will Haley, Cyrus L. Oliver, Zina H. Spinney, also the first keeper, Mr. Henry Day, and wife. The ebb tide was setting out quite strong and the wind increasing every moment. We had a not very rough passage on to the island, except occasionally we were wet with a little spray. We were there nearly an hour, and left for our trip home not far from 3:45 o'clock. Meanwhile the wind had risen to a gale from the southwest and the tide was running out of the river at its greatest strength, making a tremendous sea. The Captain put up sail and we started before it to run for Stage Island. We were fairly flying over the water, when I saw the Captain throw overboard a canvas bag attached to a long line, which they told me was a drag to keep her steady, and I noticed that he had every man at his post, and that each man had got out his knife, and had a hatchet laid near by to cut with. We had now gotten out into the sea about half way from Seguin to Pond Island. Every man stood firm at his post, with an eye on the seas as they rose and fell and foamed all around us like so many demons, threatening every moment to swallow us up in their madness. Orders were promptly obeyed, and every nerve put on the strain. I sat about midships watching the seas. First we were riding on the top of one about fifteen or twenty feet high and then down between them, and they about the same distance above us. Presently one broke over our boat and partly filled it. They let go the sail, and part of the crew went to bailing for life with the buckets, which were cut from their lashings in a twinkling. The others held her steady. Before she rallied from that we looked astern and there towered above us a sea nearly twenty-five feet in height, which rolled above us until about amidships and then came down on us with a roar which seemed to say to us all, "Now we have got you!" completely engulfing the men and boat at one time. Our boat was full of water. For a moment she was overpowered, but she again rallied and the water was quickly bailed out. We got our sail in place again, and once more all took a breath of relief. One second's time of mismanagement and we should all have been lost. No one could have got to our relief. The Captain said it was the roughest time that they had ever had. They managed the boat grandly, and she is a noble boat. In a short time they landed me at Martin Todd's shore. They were a wet, and at the same time a happy crew. The people ashore watching us with glasses, thought we had gone down for the last time. None of us ever expected to again reach land.

O. M. KINGSBURY, M. D.

Captain Freeman Shea, keeper of White-Head Station, thus writes to me, Feb. 9, 1885:

"We are having a pretty hard winter here, with sudden changes and severe cold weather, and now there is ice for two miles in either direction. The boys have had their faces and ears frozen a little several times, but they don't seem to mind it much. Regarding our work in this service, we have had so many disasters that I hardly know what to select as an example. One incident I may, however, relate that did not find its way into the annual report of 1884. On Nov. 26, 1883, the British schooner Emma E. Potter, 146 tons, of Annapolis, N. S., bound from Clemmonsport, N. S. to Boston, Mass., with a cargo of wood and fish and a crew of six men, stranded on Grindstone Ledge, about eight miles E. N. E. of this station, at 2:30 P. M. The patrolman discovered her at the same time, and promptly reported the disaster to the keeper. It was then blowing strong from the southeast, with a heavy sea. The weather was dark and cloudy, and every indication of a storm and gale. The new surf-boat was launched at once, and after pulling about a mile to the windward, so the sail would draw, we set the sail, and, under sail and oars, arrived at the wreck a little past 4 P. M. The wind at this time had increased to a strong gale. Found the vessel, with a signal of distress flying, rolling and striking heavily on the ledge and leaking badly. Had some difficulty in boarding her, as the sea was breaking heavily all around her. The vessel's boat had been cleared away with the intention of leaving her, but as the boat had become partly filled, the crew did not dare to leave for fear of swamping. After listening to the captain's story - (which was, that he was part owner of the vessel, and his share in her was all the property he had in the world; that he had spent nearly a lifetime upon the ocean to accumulate this, and it was hard to lose it, and, being entirely unacquainted with the coast, gave the vessel up to the keeper to do what he thought best) as the schooner appeared good and strong, it was decided to remain on board until she floated and save her if possible. So the first thing done was to reef the mainsail and hoist it, to keep her steady and prevent her from rolling and staving on the rocks, which had the desired effect for a while. The pumps were manned, and for three hours she could just be kept free. Then the water commenced gaining, and at 8 P. M. there was three feet of water in the hold. It was raining, the wind blowing a perfect gale, a high sea running, and the vessel striking heavily upon the rocks, when the captain wished to leave her, but the keeper told him that affairs were no worse than had been expected, and if we left now our work would be all for nothing; that the vessel would float or stave up in a short time, and we could then decide what to do. At about 8:30 she washed over the ledge and floated. All sail was set that she could bear, which was but little, she being half full of water and the sea breaking over her. It was then so thick and dark with rain that we could not see more than the length of the vessel. The keeper took the helm, and, placing two of his men on the lookout, managed to run her in, through a narrow crooked channel, upon the flats in a sheltered part of Owl's Head Harbor. We ran hawsers to the shore, made her well fast and furled sails. The vessel was then full of water, but could sink no deeper, as she was hard on bottom. It was now midnight and the life-saving crew were nine miles from the station, the gale preventing their reaching it, and, being wreary, all laid down on the cabin floor until morning. Capt. Jones was very grateful and thanked the crew for the service they had done him, saying that without their assistance his vessel, cargo, and probably the lives of all on board would have been lost, The vessel was worth about \$9,000 and it cost but a few hundreds to repair damages. At daylight it was blowing a gale from northwest, with snow squalls. The life-saving crew left the vessel for the station where they arrived at 9:30 A. M."

Capt. Myers, of Quoddy Head Station, gives the following thrilling description of the "most dangerous work he ever engaged in" during his experience in the service:

"On a cold morning in December my patrol reported a schooner dragging ashore on Duck Pond Ledge, at the entrance of Quoddy Bay, the wind at the time blowing south with a heavy sea. We were obliged to haul our boat about half a mile before we could launch. After launching we pulled down under the lee of the land, in smooth water, for a mile, when we got the wind and sea from Quoddy Head, the wind carrying us straight down to the vessel. Our boat fairly flew across the bay, the sea increasing. On approaching the vessel, it was suggested by one of the men that our boat would not come about in such a wind and sea without swamping. I told the crew on the port oars to be ready to swing the boat when I gave the word. I watched my chance and gave the order, when she went around like a top and met the first sea head on, or nearly so, without shipping any water. I saw by the faces of my men that all felt better after this first trial had passed.

I then dropped down to the vessel very carefully. The spars had been cut away and were lying alongside with rigging attached, the crew trying to clear the wreck. I gained the starboard side and threw the heaving stick on board. The crew eagerly caught the line and hauled our painter in. I ordered them to take our line aft and let the boat drop astern. Then hauled in as close as I dared, and, using the speaking trumpet, asked the captain if he wished to leave the vessel. He replied that he did not, but his crew did. I told him I could not take his men unless he came with them, and they must make up their minds quickly. Finding me in earnest he said he would come, and the crew made a rush for the main-boom, that was hanging over the stern, to get into the boat. I shoved clear and told them to wait till I saw the way clear to save ourselves before receiving them. I stood in the stern of the boat and watched for some time for a passage through the ledges, where the sea did not break, and at last found one. I then called the men to rig a line from the end of the main-boom and come one at a time, and I would haul in and get them. First came the colored cook, crying, next a Dutchman nearly dead with fright, then Jack, a boy, who seemed to think it fun to be taken from the vessel in the Life-Service boat, and last the captain and mate. In the meantime my men had rigged a slipline to the vessel so that we could slip and go in a moment. I then had each one placed so as to trim the boat just right, and then told my men that they must pull about three hundred yards to windward to reach the shore safely, otherwise the chance was slim. The line was let go and we were off. It was a hard pull, but we cleared the breakers a short distance from the point, and then dashed on before the wind through a narrow channel, between two ledges, about a boat's length wide, going safely through, then over a second reef, and when about three seas from the shore one combed up too heavy for her to raise, and the hollow cap, coming down over the stern, raked her fore and aft. The next carried us high up the beach, all safe, the boat half full of water. We had landed on the island of Campobello, N. B. There was a fishing camp about two miles from where we landed, to which we went for shelter after pulling our boat up. It was a six miles walk to Lubec, which would have been far better to take, but the captain of the schooner wished to stay near his vessel, that he expected would strike the ledge at low water, and so we all went to the camp. Here we found a stove, but no pipe. I sent a man to Lubec for the stove pipe, while the rest got wood and things ready to stay all night. The man was gone four hours six miles each way - and brought back with him the needed pipe, and some tea and coffee. We had put provisions in our boat in the morning before leaving the station, knowing that we could not get back till the gale let up. About 4 P. M. the wind changed to west and at dark it was blowing a northwest gale with thick snow squalls. All hands were wet and cold. We got all the fire in the old stove that we could, and six at a time would hover over it to try and get warm and dry their clothes, while the other six walked the narrow floor. Myself and men gave the best chance to the wrecked crew, as they had lost, or expected to lose, all their personal effects, and felt badly. The night grew colder and colder. At midnight, at Lubec, we afterwards

learned, the mercury stood at 140 below, at sunrise 190. I did not dare let the men go to sleep, as I knew they would freeze to death when unconscious. I therefore moved from one to the other and kept them awake. At 3 A. M. our supply of wood gave out, and then we tore down the berths in the camp and burnt them. We went out, and, cutting down a large tree, we dragged it to the camp, upon which we took turns chopping until daylight. We kept an iron pail, full of hot coffee, on the stove all night, and each drank what he wanted. The bread brought from the station, though wet with salt water, was quite palatable. We had a good supply of salt beef, also, from the station. At daylight everything was covered with frost - all the trees and bushes white. Some of the men proposed to start for Lubec, against which I protested, until after the sun should rise and warm the air a little. At 8 A. M. we discovered the schooner lying in as good a condition as when we left her the day before. The wind from northwest had swung her clear of the ledges and she was riding at her anchors all right. At 9 A. M. we prepared to leave the camp. We had, for two miles, to face a cutting northwest wind to reach our boat, part way through woods, and, starting the party ahead, I remained to put out the fire, overtaking them in about ten minutes. I found the negro cook with his face frozen and one of my crew taking the frost out of it with snow. I had put on a long oil cloth coat, on leaving the . camp, and it froze so that I could not walk. I tried to tear it off, but it was new and would not be torn, and so, after sending the negro ahead, I went back to the camp where I found heat enough to warm my coat, and then followed the men through the woods, calling upon them as I went along fearing lest they should get separated. On reaching the edge of the woods I could only see ten ahead of me. I asked the captain who was missing. He said, "No one." "Why," said I, "here are only eleven." "Jack has not come out of the wood yet," he replied. "Why did you leave that boy?" I asked, rather severely. "Ah," said he, laughing, "he's a cute scamp and will come out all right." I went back to find Jack, and, after going some distance into the woods, I called and the boy answered, coming along with the captain's gripsack almost as large as himself. I asked him where he had been. He said he had to carry the sack and took his time. "Did he give you that to lug for him?" I asked. "Yes," he replied. "Why did you not throw it away?" "Oh, the captain's papers and some good clothes are in this." "Well, Jack, I expected to find you frozen." "Oh, I am all right, but this got heavy, and I had to stop and beat my hands and rub my face." The captain might weigh two hundred pounds and Jack perhaps one hundred, still he had shirked the bag, containing his papers and good clothes, upon the boy, with the mercury 19° below zero. I took the sack, and Jack and I soon reached the boat where the others had assembled. We launched and pulled out to the vessel, finding her iced up badly. When alongside one man managed to climb on board. and put over a ladder, and, as fast as possible, all hands got over the side. I stopped in the boat, passed out everything movable, and then went on deck. Had our boat dropped astern to stay till the weather modulated. After getting on deck I found that my right hand was frozen, the two middle fingers very badly. Leavitt, of my crew, had his face frozen, Small the same, Fanning, fingers, A. Guptil, ears and nose (bad), G. L.Guptil, both hands. Of the vessel's crew, Captain, ears, nose and two fingers, negro cook both hands, Dutchman, face, mate, feet and hands, Jack, the boy, not a nip. Morong, of my crew, not frozen any. We stayed on board the vessel until 3 P. M. when the wind died away, when I thought we could get home and started, arriving at the station at 5 P. M., a sorry crew enough. The worst of it was that had we not gone near the vessel the crew would have fared better than they did in our hands, as the wind changed and she swung clear of the ledges, but had the wind kept south, and no one gone to them, no doubt all would have been lost. After arriving at the station I sent a dispatch for a towboat, and next day she came down and towed the vessel away. She was the Commodore Carney of Calais, Me., Capt. John Mason, and four men."

Capt. William Marshall, keeper of Crumple Island Station, thus writes:

"One of our hardest jobs was on Feb. 7, 1883, when the schooner *Elizabeth*, of Calais, Me., was wrecked on Steals Harbor Island. We boarded her at about 6 P. M., but found no one on board. She was full of water, loaded with a general cargo. We could not get her off. Stopped by her all night, to protect her cargo, and until 4 P. M., next day without food. The distance from the station was about four miles. The Captain and crew of the schooner stopped at the light house."

Capt. L. E. Wright, keeper Cross Island Station, details one severe experience:

"I have rendered assistance to a large number of vessels, among them the schooner Billow, Dec. 13th, 1883. The lookout sighted her with his glass about 8 A. M. eight miles off shore. The weather was very cold, the wind blowing very strong, and a heavy sea running at the time. We launched our boat and pulled off to her. She was lying on her beam ends and full of water, having been in collision and abandoned. After several hours of hard labor we succeeded in righting her and bringing her into Cross Island Harbor. I then telegraphed to her hailing port, (Canning, N. S.,) her crew having landed at Eastport, Me., in the vessel in collision with the Billow, and started for home, having given the vessel up as lost. Hearing that their vessel was saved they came back, arriving at the station, several days later, in a destitute condition; we having, in the meantime, repaired the break in the vessel's side, freed her from water, and put everything about her in as good order as possible. After keeping the crew several days at the station, and giving them provisions to last to Eastport, I secured the services of the Revenue Steamer Levi Woodbury to tow the disabled schooner to that port. The Captain left, feeling thankful to the Life-Saving Service."

Capt. G. T. Hadlock, keeper Cranberry Isles Station, Me., writes as follows:

"I shall try to give you a little account of the risks that are taken and the exposures endured by us in trying to save life and property. December 4, 1882, the East patrolman came to the station and informed the keeper that he thought he saw a light over by East Bunker's Ledge, but could not tell whether it was a vessel at anchor or not. The keeper went over to the north side of the island, taking the glasses with him, but though he could make out the light, he could not tell whether it was a vessel at anchor or not. He got back to the station as quick as he could, and, at 11 P. M., launched the surf-boat and started to find out what it was. Upon arriving at the ledge it was found to be the side light of schooner Wm. Lancaster, of Weymouth, N. S., on the ledge. Boarded her and told the captain to remain by his vessel, and on the flood tide we would try and get her off, as she was not much damaged. He said that if I thought I could take them off, after the flood tide made, he would stick by the wreck. I told him that we would go ashore on the ledge, and would be sure to take them off if there was no chance of saving the vessel. It was so rough that we could not keep our surf-boat alongside without being stove, so we went ashore on the ledge, hauled our boat up out of the water and turned her up, to break the storm off from ourselves as much as we could, and then travelled back and forth under the lee of the boat to keep from freezing. As soon as the tide flowed enough to let us get alongside the wreck, we went to her. I put two of our boat's crew on board, and ordered them with the assistance of the vessel's crew to hoist a two-reefed four topsail and jib and guy them over on the windward side, to press her bow off as soon as it lifted off the rocks. The wind was at that time one point on the starboard bow, and on a heavy sea she lifted forward and the sails pressed the bows off. The keeper told them to lay aft to hoist the two-reefed mainsail, and on the next heavy sea the sails pressed her off. There was more sail than the vessel could bear, but our object was to keel her over on her side and slide her off the ledge if we could. By doing as was done, the vessel and crew were saved. We towed her into Cranberry Island with safety, and, but for the assistance of the Life-Saving crew, she would have gone to pieces and the crew have been lost, as the sea was so rough that their poor boat could not have been got from the davits without being swamped if not stove to atoms. We returned to the station at 7 A. M., after being exposed seven hours and a half, wet, tired, hungry and cold. Feb. 11, 1883, the schooner Madawaska Maid, of Gloucester, Mass., ran on the East Bunker's Ledge, in a blinding southeast snow storm, about one and a half miles from the island. She was not discovered until sometime after, when the surf boat was launched, the wind then blowing a southeast gale. Upon arriving at the wreck we could not see any one on board and no boat was visible. We pulled around the ledge to see if the crew had got on shore in their boat. Seeing nothing of them, we pulled back to the wreck and dropped our anchor to windward. The sea was then breaking over the vessel half mast high. Watched our chance and dropped under her stern; then put one of

our surfmen on board to see if there was any one in the cabin dead or alive. While our man was on board she broke in two, abaft the mainmast, and the stern was thrown farther over the ledge. We had to take our man off the jib-boom. He came very near being washed off, but saved himself by getting hold of a rope, under the waist of the vessel, and holding on with all his might. He came up out of the water, spouting like a whale, fully waterlogged. There was no one on board, the crew having got off, as soon as the vessel struck, in their own boat, and landed at Southwest Harbor. The vessel went to pieces."

Capt. James E. Goldthwaite, Biddeford Pool Station, writes very modestly of the business of his field during the past year; but, though spared the fierce trials of other stations, he has in former seasons done good work, and has been ready for emergencies that have providentially been spared. There is no better or more efficient crew in the service, as I can certify, and no better keeper than Capt. Goldthwaite. He says:

"We are about making preparations (April 20, 1885) for getting the house in order before leaving, or, in other words, we have begun our 'spring cleaning.' We have been very fortunate, this winter, in being spared any serious disaster, but we feel that we have done our duty, and done it well; and although we have not been called upon to try our mettle, we hope the public is satisfied with our service, assured of our willingness and readiness to do when occasion offers."

In addition to the above, I submit the following pleasant bit of rhyme, which shows the keeper in the light of a poet as well as sailor, and serves to brighten up the atmosphere of storm and peril that invests the rest:

THESE BOYS AND ME.

If you'll give me your attention,
I'll see what I can do,
In relating circumstances
About myself and crew.
We watch the coast for vessels,
That may drive upon the lee,
And that's what Uncle Sam expects
Of these boys and me.

himself, letting his actions speak for him, but there is no more efficient keeper along the Maine shore. He says:

"This station has been manned three years the 14th day of January, 1887, and during that time we have rendered assistance to twenty-eight vessels, valued at \$290,000, with cargoes valued at \$18,775, and having on board 144 people, causing us to go off in our boat forty-five times, rescuing seventeen men and two lady passengers. Besides this we have made four trips to Seguin Island, the last the worst, which came near being our last anywhere. (Experience given in previous letter, on page 382.) I would further say that, during the four winters we have been here, the men have never missed walking twelve miles in four hours but three times, and then two men were out together, for company, in case of need."

Capt. G. F. Hadlock, of Cranberry Isle Station, gives a very interesting letter, descriptive of life at the station, and shows activity of mind as well as body in discharge of duty. He says:

"I write you at this time with a wish to give you an idea of our every-day life at this station, in fine weather. After the regular routine work is done, consisting of making beds, sweeping, trimming lamps, examining boats and gear to see that everything is in its proper place, then our exercises are taken, as follows: On Monday, Beach Apparatus Drill and examination of all the lines, together with exercise of surf-boats. Tuesday, exercises with Wednesday, exercise with Code signals. Thursday, Beach surf-boats. Apparatus drill. Friday, exercise at restoring the apparently drowned. Saturday, general house-cleaning. One surfman at a time is allowed to visit his home, and the men are allowed to gun or fish, but they must not go out of sight of the station, and must be within call if needed. We have good duck-shooting near the station in the fall and spring, but mid-winter there are but few birds. We get some rare birds here: the Glancus gull, blackbacked gull, burgomaster gull, white-winged gull, etc. When stormy weather comes, all hands must be at the station, unless on patrol or wreck duty. The patrol is kept up day and night if the weather is thick. If a wreck occurs, as soon as we get back to the station everything is put in order as quickly as possible and a patrolman sent out. If a boat is stove it must be mended at once, so that it can be used, if needed, before we rest or sleep. Sunday afternoon, when the weather is fine, our wives come to the station and take tea with us. Sometimes we have preaching at the station and people come from the other islands. We play dominoes, sometimes, for pasttime. No cards are allowed at this station. We have a great many papers sent us by tourists who have visited this station, and we are very glad to get them."

One incident that occurred at this station, which received attention at the time, was the wreck of schooner Afton, from St. John for Portland, Me., which ran upon Cranberry Island Bar, and was a complete wreck. From a printed account, we learn that the men were reduced to the utmost extremity, took to the rigging, where they were compelled to stay for many hours, until relieved by the men from the station. Their rescue is thus described:

"When their hopes were well nigh gone, the men espied the Cranberry Island Life Saving Station men coming to their rescue. The high sea prevented them from boarding the vessel, but with promptness the life saving men set about to effect their rescue. The rocket apparatus was quickly put in use, and a line thrown towards the schooner. The men on board the schooner failed to catch the line. Again line after line was thrown, and as the men failed to catch them, they became disheartened. The eighth line thrown, however, was caught and secured, and the exhausted men effected a landing, one by one. As quickly as possible they were taken to the life saving station and supplied with dry clothes, and everything possible was done for their comfort."

A letter from Capt. Wm. Marshall, of Crumple Island Station, which has been the scene of very efficient action in past years, is a pleasant addition to the matter which has already been gathered:

APRIL 23D, 1887.

Mr. Joseph W. Smith, Andover, Mass.

Dear Sir:—Our station is about seven miles from town and three from the nearest inhabitant. It is a small island of about eight acres, upon which there is not a living tree, and consists mostly of rough rocks, its highest part being some hundred feet above the level of the sea. The great Wass Island lies a mile to the eastward, and a small island, called 'Irishman's Island' to the northwest, one fourth of a mile. There is a large ledge lying to the westward, and sunken rocks, between that and the island, present very pretty scenery for any one not accustomed to the seashore. There is also a reef of rocks running in a westerly direction about a mile and a half, which affords a capital resort for gunners, who go there to shoot sea birds flying eastward in the spring, and westward in the fall. Our crew consists of eight men, including myself, and we keep ourselves busy by performing the duties of the station, both day and night. We have had few wrecks this season, the worst of

which was the British brig Dart, which occurred on the 6th of Sept., 1886. The crew consisted of eight, with four passengers: two ladies and a child, and one gentleman. She struck about ten A. M., and I boarded her in the surf-boat in about fifteen minutes, taking the passengers ashore. I tried to get the vessel off, but she bilged on the rock as the tide flowed. I commenced to strip her, and, with the help of five fishermen, had her all stripped and her gearing ashore, except spars and standing rigging. About six o'clock P. M. she began to break to pieces, and was a total wreck. Our time is about up, and my crew leave me about the first of May, when I have to stop here alone for about four months to look after the property, the wrecks if there are any, and take my share of gunning during the gunning season.

Yours truly,

(Signed) WM. MARSHALL.

Cross Island, near Cutler, Me., is a very important station, and some good work has been done there. Its keeper, Capt. L. E. Wright, writes me as follows:

"We do not have many wrecks, but have assisted nine in about three years. In every case we have done all in our power to render them service. We have not lost a life in this immediate vicinity since I took charge in 1879. We are situated on an island about six miles from a post office. The only dwelling house on the island is occupied by one of the surf-men belonging to his station. Our island is quite large - about 2,000 acres mostly covered with a thick growth of birch and spruce. It is quite a place for game. All kinds of sea-fowl that frequent these waters make us a visit, either on their spring or fall migration. There are quite a number of wild deer on the island - seventy-five or a hundred of them I should judge. The owners of the island have had a special law passed for their protection. They are increasing very fast. I have one tamed that follows my cows round every day and comes home with them at night. The summers are quite pleasant here, but the winters are very monotonous. You, can rest assured that the books you presented to this station have been well read. My boat's crew are all local fishermen, and have spent a good part of their days in a boat. They all attend to their duty in good shape. They are all steady, sober men and have been here, with one or two exceptions. about seven winters, during which time I have not known of a quarrel among them. All of the officers of the Life Saving Service who have visited us seem to be perfect gentlemen. We go through our drills every day, Sundays excepted, and think we are quite proficient in them. The shortest time we have made with the beach apparatus gear was before Capt. Lay, of U. S. schooner Dallas. We fired the shot seventy-five yards, with line, and set up the gear exactly as if working at a wreck at that distance, and landed one man in three and a half minutes, as recorded by Capt. Lay. He said that it was the quickest that it had ever been done by any crew within his

knowledge. The men get leave of absence about once in three weeks, as only one can go at a time, and then only in pleasant weather. There is a good harbor on the north side of the island."

The books alluded to by Capt. Wright were supplied by myself, to this and the like to other stations, a gift that gave me the greatest delight to bestow, and has been met by a return of thankfulnesss, from all the stations, that has proved it an unrivalled investment. These form but a nucleus of what I hope may be added to, and become respectable libraries.

Life-Saving Station, Quoddy Head. The coast along the Lubec shore is exceedingly dangerous, and the station men there have to be constantly on the alert. Capt. A. H. Myers, the keeper, has a very graphic way of narrating incidents, and, in response to my request for facts, he writes me the following:

"Jan. 9, 1886, at 4:30 A. M., the man on the west patrol saw the lights of a. vessel through the mist, and burnt a Coston light to warn them to haul off shore. He watched for some answering signal, and found the vessel was at anchor, with her side lights burning. He returned to the station and reported. The wind was light, with snow. I sent him back, as it was not uncommon for a vessel to anchor where she was, to wait for the tide. He passed close by where she lay, burned another light and passed on, getting no answer. He reached the end of his beat, struck his watch, and started to return, when the gale set in with a blinding snow storm. He hurried along and heard some one call for help, and a crew of half frozen men appeared to him on the beach. They had left the vessel when the tempest struck them in their own boat, and steered for where they had seen his light, doubtless saving their lives by so doing. He conducted them to the station, where they were cared for. The vessel dragged in and sank at her anchor, afterwards beating up the beach. No boat could have reached her half an hour after the gale struck her. The vessel proved to be the schooner Frederic D., of St. John, N. B. The crew were badly frozen.

While caring for this crew, the eastern patrol reported a vessel driving ashore near the Relief House in Quoddy Bay. We all started for that point, carrying our gear for working the beach apparatus. On reaching the beach, I saw that the vessel would not strike there, and that no boat could live in such a sea. I ordered all hands back to the station for the new surf-boat and apparatus cart. We dragged the boat across the neck of land and then the

apparatus. The whole beach was covered with ice. But I knew that, as the tide rose, the ice would pile up in such a sea, when I would place the apparatus in the boat and risk the chance of reaching a sand bar about half a mile distant, where the vessel would probably strike. If I could get to leeward of that bar with the boat, we would be comparatively safe and have boat or apparatus to work with. As the ice cleared off with the rising tide, we launched our boat, and I am sure no one thought she would live, but all took their chance. Hardly a word was spoken. She floated like a duck and reached the bar, but I then found it impossible to row against the wind and drift ice. I sent the men ashore with a line, and went myself, leaving one man to steer. We started, dragging her up the beach by the line. I had just reached the shore, when one of the men saw the vessel coming in on the rollers. I told my men to drag the boat along abreast of her, and I would run ahead and show myself, to let them know that help was coming. I had got to within about fifty yards of the vessel when they saw me and commenced to call for help. I then saw the yawl boat trailing astern, full of water, as she rose on a sea, and three men, standing, pulling on a line from the boat. I followed the range of the line, and saw a man's head come out of the water at the bow of the boat. I saw that he was about gone, and resolved to save him, if possible. The vessel was coming in all the time and I made a rush for her. Just as I reached the stern, with my hands fast to it, the sea piled over me. I hauled myself into the boat and worked my way to the bow. The man had lost consciousness and his head had sunk. I found his arm caught in the painter. I pulled his head out of the water but could not get him into the boat. He was fouled by lines under the boat, and every sea was covering me all up. The vessel's stern struck the shore, and as she lay at an angle, the sea came around the bow and carried me, boat and all, fifteen fathoms out to windward of the vessel. As I went out, I heard the men on the vessel say, "For God's sake save yourself! He is dead," meaning the man whom I was trying to rescue. I still held the man out of water as the vessel went side on, and the boat passed in again by the stern. I heard the men call to me to save myself, and I thought it time, as I began to chill in the icy cold water. As the boat went in on a roller I let go the man and put for the shore. I had just strength enough to reach it. I got my breath, and, seeing two men, not belonging to my crew, coming over the beach, I called to them for help, but they kept clear of the sea. I rushed for the boat again, and this time caught the stern, and held on until the next sea, when I ran the boat up on the beach. The waves left her free. I cleared the man from his entanglement among the ropes, and, four of my men arriving, we carried him over the ice wall to the dry beach, where we tried to resuscitate him. He breathed after a few moments, and our hopes were strong that he would recover, but his head and face were fearfully bruised between the vessel and boat, when he fell overboard. I sent for a team while we were working upon him to get up circulation, upon which he was placed and taken to the nearest house, where he died in about eight minutes. We threw the line to the rest of the crew, which they took up the rigging, and swung ashore dry. If the captain had been seaman enough to have stayed by the vessel he

could have saved all in ten minutes after she struck the beach, but he was not a practical sailor, and was running his vessel under a sailing master, who told him not to try to get in the boat, and endeavored to stop him, but while his attention was called to something else, the captain attempted to haul the boat alongside. The bight of a line caught him on the back, the line being fast to the boat which was full of water, and pulled him over, the men being too frightened to save him. After they were safe they told conflicting stories about it, and I concluded that they were so frightened on finding the vessel going ashore that they were not accountable for anything they did or allowed their captain to do. The vessel was the *Myrtel Purdy*, of St. John, N. B., captain W. E. Elsworth, whose remains were properly cared for and sent to his friends.

Half an hour after the *Purdy* struck, the schooner *Billow*, of St. Andrews, N. B., came on about one hundred yards further north. I shot a line to her, and had the crew ashore in ten minutes. At the same time the schooner *Alabama*, of Calais, Me., was riding at anchor with flag of distress flying. Too far for a shot-line, we launched the boat and pulled out to her, offering to take the crew off, but, after the captain had asked for advice, they concluded not to leave, and they rode out the gale.

We had a fearful race back to the shore. We were obliged to reach a certain point before the tide had got too low, and I kept her before the wind and sea, letting her go without drag or anything to hinder her. She did go, and we reached the shore safely and on time, glad to get off so well. We found hundreds of waiting hands to help us with our boat. At eight P. M. we reached the station, as tired as we could be, with the first loss to record out of seventy-three disasters to vessels.

I must also mention our volunteers for the day. Captain James, of the schooner *Frederic D*., and his crew, though frostbitten more or less, willingly came out and helped us get our apparatus and boat to the beach through the deep snow. Captain George Bently, likewise, whose vessel, the *Sea Flower*, wrecked December 26, he was trying to save, left her to go where she might, was a volunteer in the surf-boat, and worked valiently all day. I afterwards got a letter of thanks for him from the department."

Captain Myers likewise gives a description of the routine life of the crew, their characters and customs, their privileges, about the same as at the other stations. "My crew," he says, "are all middle aged men, used to roughing it. Two belong to the church; the rest of us are outside the fold, but rather pride ourselves on our morality. For eight months in the year we have no entertainments. Our time is employed in the discharge of our daily routine business, a few games, and plenty of reading, thanks to yourself and others."

A GENEROUS TESTIMONIAL.

Just as we close this volume we learn of a most generous remembrance of the services of a life-saving crew of a Virginia station, all of whom perished, save two, in an heroic attempt to rescue a German ship, on the 8th of January, 1887. Such recognition is not only richly merited, but must serve to encourage the brave fellows who risk their lives in the cause of humanity. The following dispatch from Washington, D. C., was published in the daily press of July 19, 1887:

The secretary of state has received through the German minister at Washington, from the emperor of Germany, a check for \$10,000 and two handsome gold watches embellished with the likeness and monogram of the emperor, with the request that the money be divided equally among the families of the five members of the life-saving crew at Damneck Mill Station, Va., who lost their lives in attempting to rescue the German ship Elizabeth, on Jan. 8th, and that the watches be presented to Frank Tedford and Joseph F. Fetheridge, the only survivors of the life-saving crew.

CONCLUSION.

The Life-Saving Service having proved its effectiveness, and those engaged in it their worthiness of public regard, an appeal in their behalf may not be amiss in this connection. From their isolated position, shut off from association with the world during the six inclement months of the year, their lot is a very dreary one, with few resources of relief. Even the perils they are at times called to encounter would tend to diversify the dreary hours of waiting and watching amid the cold and tempest. These may seldom occur, but the duty of readiness is imperative, and they must remain at their post amid solitude and gloom, exposed as much to the danger of mental derangement in their quiet, as to physical peril when the time of trial comes. True they are companioned and not left, Crusoe-like, to complete loneliness, yet it is little better; confined to

solitary isles, on the worst part of the coast, with the stormy sea their exclusive field of observation, their thought and conversation constantly turning to the nature of their employment and the contingencies involved, the mind must necessarily be depressed. In some lighthouses that are upon remote rocks in the sea, in order to prevent the evil likely to result from the monotony of such position, the keepers are required to engage in fishing, or, where practicable, in some little agricultural employment whereby to preserve their mental balance. There was a story told of one in former time who, appointed to the Whale's Back Light, off Portsmouth Harbor, took his plow with him to meet the emergency, but, as the rock on which the lighthouse was placed was under water nearly all the time, without a grain of soil, the plow was unused. Our Life-Saving crews are composed of intelligent, sober men, the graduates of our New England schools, and therefore a supply of intellectual food is necessary, to keep their minds in healthy vigor during the time of their incarceration between September and May. Struck with this necessity I have, in a small way, endeavored to supply the want in the several eastern stations. This needs the co-operation of those who cannot help seeing the benefit to result from such a course, and who, I am assured, will respond to the appeal made to them. No more worthy object than this could commend itself to the consideration of the generous. and the assurance is felt that it will be successful.

I am induced thus further to introduce my personality in this matter from a sincere conviction of the great merit of the object, having become thoroughly acquainted by direct observation, with the necessity of the case, and of the worthiness of those to be benefited. Actuated by no wish for fame in the premises, my aim simply being to further a great good, I trust that my personal appeal may induce the friendly readers of my book to take an interest in the work thus commenced.

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